

SAFETY DATA SHEET (SDS) according to Regulation (EC) No. 830/2015 amending 1907/2006

1.1	Product identifier:		e company/undertaking Calcein AM		
1.1a	Other means of identification	n·	Calcelli Aivi		
			Calcein AM lyophilized reagent		
1.1b		ct name(s)/ synonyms:		zed reagent	
1.1c	Product number/0		6696		
1.1d	Internal identifica		Calcein AM	al. Not for one in diamentic annual and	
1.2	Relevant identified uses of the substance or mixture and uses advised against:		For research use o	For research use only. Not for use in diagnostic procedures.	
1.2a	Brief description of what the		Green fluorescent	vital dye	
4.0	intended to do:				
1.3 1.3a	Details of the supplier of t	ne SDS:	ImmunoChomietry	Technologies LLC (ICT)	
1.3b	Name: Address:			Technologies, LLC (ICT) ue South, Suite 155	
1.3c	City, State, Zip, C	ountry	Bloomington, MN 5		
1.3d	Phone number:	ountry	1-800-829-3194 an		
1.3e	Fax number:		952-888-8988	lu 332-000-0700	
1.3f	Website:		www.immunochem	istry com	
	Email:		help@immunocher		
1.3g		LICT:	Quality Documenta		
1.3h	Contact person a				
1.4	Emergency telephone nui	mber:	ICT hours are 9 am (excluding holidays	94 (USA & Canada) or 952-888-8788 world wide; n-5 pm central time USA, Monday through Friday s). Chemtrec 24-hour access within USA and 1-9300 or +1 703-527-3887. Collect calls accepted	
Sectio	on 2: Hazards identification				
2.1	Classification of the subs	tance or mixture:			
2.1a	Product is a:		Substance.		
2.1b	Classification according to ({CLP}:	•	Does not meet the	criteria for classification.	
2.1c	The most important adverse health, and environmental e		Refer to Sections 9-12.		
2.2	Label elements:		None.		
2.2a	GHS label elements, includ statements:	ng precautionary	None.		
2.2b	Contains:		None.		
2.2c	Labeling in accordance with	(EC) No. 1272/2008:	None.		
2.2d	Hazard Pictograms (Hazard		None.		
2.2e	Signal word:		None.		
2.2f	Hazard statements:		None.		
2.2g	Precautionary statements:		None.		
2.2h	Supplementary precaution s	statements:	None.		
2.3	Other hazards:		No additional inform	mation available.	
2.3a	Does the chemical meet the	criteria for PBT or vPvR?	Not applicable.		
2.3b	Other hazards which do not		No information ava	ilable.	
<u>Sectio</u> 3.1	on 3: Composition/informati Substance:	on on ingredients	Item is a substance		
J. 1	Substance.		nem is a substance	.	
	3.1a Chemical identity:		Calcein AM		
	3.1b Common name, synon	yms, etc.:		ein O,O'-diacetate tetrakis (acetoxymethyl) ester,	
	, ,	-	Calcein acetoxyme		
	3.1c CAS number and		3.1e %	3.1f Classification according to (EC) No.	
	other unique identifiers:	3.1d EC number:	Concentration:	1272/2008 {CLP}:	
	148504-34-1	Not applicable.	≥ 95% by HPLC	Not classified.	
3.1g	Chemical identity of any imp	ourity, stabilizing additive,	None known.		
_	or individual constituent oth				
	constituent, which is itself c	assified and which			
	contributes to the classificat				
	identifier, trade name, ident				
	Other information on the substance:		Molecular Weight: 994.9 g/mol		
3.1h	Other information on the su	usianice.	Wolcould Wolgitt.		

Calcein AM SDS; Doc# F17-6696-2-A; Effective: 07/26/16; Supersedes: None; Page 2 of 6 3.2 Mixture: Item is a substance, therefore Section 3.2 is not applicable; see The chemical identity and concentration or Section 3.1. concentration ranges of all ingredients which are hazardous and are present above their cut-off levels: Section 4: First aid measures 4.1 Description of first aid measures: If concerned, get medical attention/advice and provide physician with SDS information. Wash contaminated clothing before re-use. Never give anything to an unconscious person. Due to the small packaging the risk of inhalation is minimal. Remove to 4.1a Inhalation: fresh air and keep at rest in a comfortable position for breathing. If not breathing, give artificial respiration. Rinse nose and mouth with water. Get medical attention if any discomfort continues. Skin contact: 4.1b Wash skin thoroughly with soap and water for several minutes; continue to rinse for at least 15 minutes. Remove any contaminated clothing and shoes and wash thoroughly before reuse. Get medical attention if any discomfort continues. 4.1c Eye contact: Promptly wash eyes with plenty of water while lifting the eyelids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK 4.1d Ingestion: FLUIDS! Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if any discomfort continues. 4.2 Most important symptoms and effects, both acute and delayed: 4.2a Inhalation: May cause coughing or mild irritation. 4.2b Skin contact: Prolonged skin contact may cause mild irritation. Eye contact: 4.2c May cause temporary eye irritation. May cause discomfort if swallowed. 4.2d Ingestion: Indication of any immediate medical attention and No specific first aid measures noted, but first aid may still be required 4.3 special treatment needed: in case of accidental exposure, inhalation, or ingestion of this product. If in doubt, get medical attention promptly! 4.3a Notes to physician/first responder: Treat symptomatically. Refer to Sections 5-8 for advice on personal protective equipment. Section 5: Firefighting measures 5.1 **Extinguishing media:** Use fire-extinguishing media appropriate for the surrounding materials. 5.1a Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical powder, or carbon dioxide. 5.1b Unsuitable extinguishing media: None known. 5.2 Special hazards arising from the substance or No dangerous reactions known under normal conditions of use. Dust mixture: may have the potential to explode in the presence of an appropriate ignition source. Emits toxic fumes under fire conditions. Carbon oxides, Nitrogen oxides (NOx) 5.2a Hazardous combustion products: Emits toxic fumes under fire conditions. 5.2b Unusual fire & explosion hazards: Use protective equipment appropriate for surrounding materials. Protective measures in fire: 5.2c 5.3 Keep away from heat, hot surfaces, sparks, open flames and other Advice for firefighters: ignition sources. No smoking. No specific firefighting procedure given. Special firefighting procedures: 5.3a 5.3b Special protective equipment and precautions for Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards firefighters: in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Section 6: Accidental release measures 6.1 Personal precautions, protective equipment, and emergency procedures: 6.1a General release measures: Wear suitable protective clothing, gloves and eye or face protection. Use in well-ventilated area. Avoid dust formation. Avoid all personal contact, including skin contact, eye contact, and inhalation of vapors, mist, or gas. Consult professional emergency personnel if concerned (see Section 8). Clean up spills immediately. Place in suitable, closed container for disposal. 6.1b No specific emergency measures are required other than good Advice for non-emergency personnel; personal

laboratory hygiene and safety practices. Wear suitable protective clothing, gloves and eye or face protection to avoid contact with skin,

eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid

precautions, protective equipment and emergency

procedures:

Calcein AM SDS; Doc# F17-6696-2-A; Effective: 07/26/16; Supersedes: None; Page 3 of 6

	Calcein AM SDS; Doc# F17-6696-2-A; Ef	ffective: 07/26/16; Supersedes: None; Page 3 of 6
		breathing vapors, mist, or gas. Evacuate personnel to safe areas. Consult professional emergency personnel if concerned.
6.1c	Advice for emergency responders; personal precautions, protective equipment and emergency	Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of
6.0	procedures:	emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses.
6.2	Environmental precautions: Methods and materials for containment and	Contain any spills with dikes or absorbent materials to prevent
0.3		
	clean up:	migration and entry into sewers or water sources. Place in a suitable container for disposal in accordance with local waste regulations (see
		Section 13). Wash spill area thoroughly with plenty of soap and water.
		Avoid contact with skin or inhalation of spillage, dust, or vapor.
6.4	Reference to other sections:	Refer to Sections 8 and 13 for additional information.
		recent to occurre of and 10 for additional information.
Section 7.1	n 7: Handling and storage Precautions for safe handling:	Further processing of solid materials may result in the formation of
/	Precautions for safe flatiding.	combustable dusts. The potential for combustable dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is
7.1a	Prevent handling of incompatible substances or	formed. Store away from oxidizing agents.
7.1a	mixtures:	Store away from oxidizing agents.
7.1b	Advice on general occupational hygiene:	Do not eat, drink, or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Good personal hygiene is necessary. Follow good laboratory hygiene and safety practices.
7.2	Conditions for safe storage, including any incompatibilities:	Refer to product label. Store in cool place. Recommended storage temperature is -20 °C. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Protect material from long-term exposure to light. Avoid spills and release into the
7.3	Specific end use(s):	environment; keep away from watercourses. For research use only. Not for use in diagnostic procedures.
7.3	Specific end use(s).	For research use only. Not for use in diagnostic procedures.
Section	n 8: Exposure controls/personal protection	
8.1	Control parameters:	
8.1a	Occupational exposure limits, such as chemical identity, standard, TWA-8 hours (time weighted average), STEL-15 minutes (short term exposure limit), etc.: WEL = Workplace Exposure Limit. Sk = can be absorbed through skin.	Contains no substances with occupational exposure limit values.
8.1b	Appropriate engineering controls:	Ensure adequate ventilation, especially in confined areas. Respiratory
		protection should be considered if an adverse concentration of the substance in the air could occur.
8.1c	Individual protection measures, such as personal protective equipment:	Wear suitable protective gloves. Wear protective goggles. Wear lab coat with full coverage clothing. Respiratory protection may be appropriate in some circumstances.
8.1d	Safety symbols:	
8.2	Exposure controls:	
8.2a	Process conditions:	Provide eyewash station.
8.2b	Engineering controls:	Local exhaust ventilation is recommended for providing adequate ventilation. Ensure that eyewash stations and safety showers are proximal to the workstation location.
8.2c	Ventilation controls:	Provide adequate ventilation.
8.2d	Reference to other sections:	Refer to section 5 for additional information.
8.2e	Eye/face protection:	Chemical goggles or safety glasses.
8.2f	Skin protection:	Wear suitable protective clothing. Wear long sleeves.
8.2g	Hand protection:	Use suitable protective gloves if risk of skin contact.
8.2h	Respiratory equipment:	Respiratory protection is not required. Where excessive dust may
0.0	Other waste stiers	result, use NIOSH approved respiratory protection equipment.
8.2i	Other protection:	Wear appropriate clothing to prevent any possibility of skin contact.
8.2j	Hygiene measures:	DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking, and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink, or smoke. Wash
0.01-	Thermal hexarder	promptly with soap and water if skin becomes contaminated.
8.2k	Thermal hazards:	None known.

Calcein AM SDS; Doc# F17-6696-2-A; Effective: 07/26/16; Supersedes: None; Page 4 of 6

8.2l Environmental exposure controls: Do not let product enter drains. Section 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties: 9.1a Appearance (physical state, color, etc.): White solid, powder, dust 9.1b Odor: No characteristic odor. 9.1c Odor threshold: Not determined. 9.1d pH: Not determined. 9.1e Melting point/freezing point (°C): Not determined. 9.1f Initial boiling point and boiling range: Not determined. 9.1g Flash point (°C): Not determined. 9.1h Evaporation rate: Not determined. 9.1i Flammability (solid, gas): Not determined. 9.1j Upper/lower flammability or explosive limits: Not determined. 9.1l Vapor density (Air =1): Not determined. 9.1m Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO solubility or partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined. 9.1q Decomposition temperature (°C): Not determined.	
Information on basic physical and chemical properties: 9.1a	
properties: 9.1a Appearance (physical state, color, etc.): 9.1b Odor: 9.1c Odor threshold: 9.1d pH: 9.1e Melting point/freezing point (°C): 9.1f Initial boiling point and boiling range: 9.1g Flash point (°C): 9.1h Evaporation rate: 9.1i Flammability (solid, gas): 9.1j Upper/lower flammability or explosive limits: 9.1k Vapor pressure: 9.1l Vapor density (Air =1): 9.1m Relative density: 9.10 Partition coefficient (N-octanol/water): 9.11 Not determined. 9.12 Not determined. 9.13 Not determined. 9.14 Not determined. 9.15 Not determined. 9.16 Not determined. 9.17 Not determined. 9.18 Not determined. 9.19 Not determined. 9.19 Not determined. 9.10 Partition coefficient (N-octanol/water): 9.10 Not determined. 9.11 Not determined. 9.12 Not determined. 9.13 Not determined. 9.14 Not determined. 9.15 Not determined. 9.16 Not determined. 9.17 Not determined. 9.18 Not determined. 9.19 Auto-ignition temperature (°C): 9.19 Not determined.	
9.1a Appearance (physical state, color, etc.): 9.1b Odor: 9.1c Odor threshold: 9.1d pH: 9.1e Melting point/freezing point (°C): 9.1f Initial boiling point and boiling range: 9.1g Flash point (°C): 9.1h Evaporation rate: 9.1i Flammability (solid, gas): 9.1j Upper/lower flammability or explosive limits: 9.1k Vapor pressure: 9.1l Vapor density (Air =1): 9.1m Relative density: 9.1n Solubility(ies): 9.1n Partition coefficient (N-octanol/water): 9.1q Decomposition temperature (°C): Not determined. White solid, powder, dust Not determined.	
9.1b Odor: 9.1c Odor threshold: 9.1d pH: 9.1e Melting point/freezing point (°C): 9.1f Initial boiling point and boiling range: 9.1g Flash point (°C): 9.1h Evaporation rate: 9.1i Flammability (solid, gas): 9.1j Upper/lower flammability or explosive limits: 9.1k Vapor pressure: 9.1l Vapor density (Air =1): 9.1m Relative density: 9.1n Solubility(ies): 9.10 Partition coefficient (N-octanol/water): 9.11 Not determined. 9.12 Not determined. 9.13 Not determined. 9.14 Not determined. 9.15 Not determined. 9.16 Not determined. 9.17 Not determined. 9.18 Not determined. 9.19 Not determined. 9.19 Not determined. 9.10 Partition coefficient (N-octanol/water): 9.10 Not determined. 9.11 Not determined. 9.12 Not determined. 9.13 Not determined. 9.14 Decomposition temperature (°C): 9.15 Not determined. 9.16 Not determined.	
9.1c Odor threshold: 9.1d pH: Not determined. 9.1e Melting point/freezing point (°C): Not determined. 9.1f Initial boiling point and boiling range: Not determined. 9.1g Flash point (°C): Not determined. 9.1h Evaporation rate: Not determined. 9.1i Flammability (solid, gas): Not determined. 9.1j Upper/lower flammability or explosive limits: Not determined. 9.1k Vapor pressure: Not determined. 9.1l Vapor density (Air =1): Not determined. 9.1n Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO solubles of the partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined.	
9.1d pH: Not determined. 9.1e Melting point/freezing point (°C): Not determined. 9.1f Initial boiling point and boiling range: Not determined. 9.1g Flash point (°C): Not determined. 9.1h Evaporation rate: Not determined. 9.1i Flammability (solid, gas): Not determined. 9.1j Upper/lower flammability or explosive limits: Not determined. 9.1k Vapor pressure: Not determined. 9.1l Vapor density (Air =1): Not determined. 9.1m Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO solubles): Not determined. 9.10 Partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined.	
9.1f Initial boiling point and boiling range: 9.1g Flash point (°C): 9.1h Evaporation rate: 9.1i Flammability (solid, gas): 9.1j Upper/lower flammability or explosive limits: 9.1k Vapor pressure: 9.1l Vapor density (Air =1): 9.1m Relative density: 9.1n Solubility(ies): 9.1n Solubility(ies): 9.10 Partition coefficient (N-octanol/water): 9.10 Not determined. 9.11 Not determined. 9.12 Not determined. 9.13 Not determined. 9.14 Not determined. 9.15 Not determined. 9.16 Not determined. 9.17 Not determined. 9.18 Not determined. 9.19 Auto-ignition temperature (°C): 9.19 Not determined.	
9.1g Flash point (°C): Not determined. 9.1h Evaporation rate: Not determined. 9.1i Flammability (solid, gas): Not determined. 9.1j Upper/lower flammability or explosive limits: Not determined. 9.1k Vapor pressure: Not determined. 9.1l Vapor density (Air =1): Not determined. 9.1m Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO soluble or Partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined. 9.1q Decomposition temperature (°C): Not determined.	
9.1h Evaporation rate: 9.1i Flammability (solid, gas): 9.1j Upper/lower flammability or explosive limits: 9.1k Vapor pressure: 9.1l Vapor density (Air =1): 9.1m Relative density: 9.1n Solubility(ies): 9.1 Solubility(ies): 9.1 Not determined.	
9.1i Flammability (solid, gas): 9.1j Upper/lower flammability or explosive limits: 9.1k Vapor pressure: 9.1l Vapor density (Air =1): 9.1m Relative density: 9.1n Solubility(ies): 9.1o Partition coefficient (N-octanol/water): 9.1p Auto-ignition temperature (°C): 9.1q Decomposition temperature (°C): Not determined. Not determined. Not determined. Not determined. Not determined.	
9.1j Upper/lower flammability or explosive limits: Not determined. 9.1k Vapor pressure: Not determined. 9.1l Vapor density (Air =1): Not determined. 9.1m Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO soluble 9.1o Partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined. 9.1q Decomposition temperature (°C): Not determined.	
9.1k Vapor pressure: Not determined. 9.1l Vapor density (Air =1): Not determined. 9.1m Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO soluble 9.1o Partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined. 9.1q Decomposition temperature (°C): Not determined.	
9.11 Vapor density (Air =1): 9.1m Relative density: 9.1n Solubility(ies): 9.1o Partition coefficient (N-octanol/water): 9.1p Auto-ignition temperature (°C): 9.1q Decomposition temperature (°C): Not determined. Not determined. Not determined. Not determined.	
9.1m Relative density: Not determined. 9.1n Solubility(ies): Slightly water soluble; DMSO soluble;	
9.1n Solubility(ies): Slightly water soluble; DMSO soluble 9.1o Partition coefficient (N-octanol/water): Not determined. 9.1p Auto-ignition temperature (°C): Not determined. 9.1q Decomposition temperature (°C): Not determined.	
9.1pAuto-ignition temperature (°C):Not determined.9.1qDecomposition temperature (°C):Not determined.	I e
9.1q Decomposition temperature (°C): Not determined.	
104 110 0	
9.1r Viscosity: Not determined.	
9.1s Explosive properties: Not determined. 9.1t Oxidizing properties: Not determined.	
9.2 Other information: None.	
9.2a Other information. 9.2a Other physical or chemical parameters: None.	
Other physical of offermout parameters.	
Section 10: Stability and reactivity	
10.1 Reactivity: No data available.	
10.2 Chemical stability: Stable under normal recommended	
10.3 Possibility of hazardous reactions: Carbon oxides and nitrogen oxides	
10.4 Conditions to avoid: To avoid product degradation, avoid	d exposure to high temperatures or
direct sunlight or light. 10.5 Incompatible materials: Strong oxidizing agents	
10.6 Hazardous decomposition products: Strong oxidizing agents None under normal conditions. Emit	ts toxic fumes under fire conditions
In the event of a fire: see section 5.	to toxic fames ander me conditions.
Section 11: Toxicological information	
11.1 Information on toxicological effects:	
11.1a Name: Calcein AM	
11.1b Acute toxicity: Not determined.	
11.1cSkin corrosion/irritation:Not determined.11.1dSerious eye damage/irritation:Not determined.	
11.1e Respiratory or skin sensitization: Not determined.	
11.1f Germ cell mutagenicity: Not determined.	
11.1g Carcinogenicity: Not determined.	
11.1h Reproductive toxicity: Not determined.	
Fig. 11 Not determined.	
11.1i STOT-single exposure: Not determined.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure .	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): .	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed. 11.1n Inhalation: May be harmful by inhalation.	ble persons.
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed. 11.1n Inhalation: May be harmful by inhalation. 11.1o Skin contact: May cause skin irritation in suscepting the suscepting symptoms related to the physical, chemical and 11.1q Symptoms related to the physical, chemical and No specific symptoms noted.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed. 11.1n Inhalation: May be harmful by inhalation. 11.1o Skin contact: May cause skin irritation in suscepti 11.1p Eye contact: May cause eye irritation with suscepti 11.1q Symptoms related to the physical, chemical and toxicological characteristics: No specific symptoms noted.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.11.1lInformation on the likely routes of exposure (inhalation, ingestion, skin and eye contact):.11.1mIngestion:May be harmful if swallowed.11.1nInhalation:May be harmful by inhalation.11.1oSkin contact:May cause skin irritation in suscepti11.1pEye contact:May cause eye irritation with suscepti11.1qSymptoms related to the physical, chemical and toxicological characteristics:No specific symptoms noted.11.1rDelayed and immediate effects as well as chronicNot determined.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed. 11.1n Inhalation: May be harmful by inhalation. 11.1o Skin contact: May cause skin irritation in suscepti 11.1p Eye contact: May cause eye irritation with suscepti 11.1q Symptoms related to the physical, chemical and toxicological characteristics: No specific symptoms noted. 11.1r Delayed and immediate effects as well as chronic effects from short and long term exposure: Not determined.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed. 11.1n Inhalation: May be harmful by inhalation. 11.1o Skin contact: May cause skin irritation in suscepti 11.1p Eye contact: May cause eye irritation with suscepti 11.1q Symptoms related to the physical, chemical and toxicological characteristics: No specific symptoms noted. 11.1r Delayed and immediate effects as well as chronic effects from short and long term exposure: Not determined. 11.1s Numerical measures of toxicity (such as acute Not determined.	
11.1i STOT-single exposure: Not determined. 11.1j STOT-repeated exposure: Not determined. 11.1k Aspiration hazard: Not determined. 11.1l Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): . 11.1m Ingestion: May be harmful if swallowed. 11.1n Inhalation: May be harmful by inhalation. 11.1o Skin contact: May cause skin irritation in suscepti 11.1p Eye contact: May cause eye irritation with susception in suscepti 11.1q Symptoms related to the physical, chemical and toxicological characteristics: No specific symptoms noted. 11.1r Delayed and immediate effects as well as chronic effects from short and long term exposure: Not determined. 11.1s Numerical measures of toxicity (such as acute toxicity estimates): Not determined.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.11.1lInformation on the likely routes of exposure (inhalation, ingestion, skin and eye contact):11.1mIngestion:May be harmful if swallowed.11.1nInhalation:May be harmful by inhalation.11.1oSkin contact:May cause skin irritation in suscepti11.1pEye contact:May cause eye irritation with suscepti11.1qSymptoms related to the physical, chemical and toxicological characteristics:No specific symptoms noted.11.1rDelayed and immediate effects as well as chronic effects from short and long term exposure:Not determined.11.1sNumerical measures of toxicity (such as acute toxicity estimates):Not determined.11.1tInteractive effects:Not determined.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.11.1lInformation on the likely routes of exposure (inhalation, ingestion, skin and eye contact):11.1mIngestion:May be harmful if swallowed.11.1nInhalation:May be harmful by inhalation.11.1oSkin contact:May cause skin irritation in suscepti11.1pEye contact:May cause eye irritation with suscepti11.1qSymptoms related to the physical, chemical and toxicological characteristics:No specific symptoms noted.11.1rDelayed and immediate effects as well as chronic effects from short and long term exposure:Not determined.11.1sNumerical measures of toxicity (such as acute toxicity estimates):Not determined.11.1tInteractive effects:Not determined.11.1uAbsence of specific data:Not applicable.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.11.1lInformation on the likely routes of exposure (inhalation, ingestion, skin and eye contact):.11.1mIngestion:May be harmful if swallowed.11.1nInhalation:May be harmful by inhalation.11.1oSkin contact:May cause skin irritation in suscepti11.1pEye contact:May cause eye irritation with suscepti11.1qSymptoms related to the physical, chemical and toxicological characteristics:No specific symptoms noted.11.1rDelayed and immediate effects as well as chronic effects from short and long term exposure:Not determined.11.1sNumerical measures of toxicity (such as acute toxicity estimates):Not determined.11.1tInteractive effects:Not determined.11.1uAbsence of specific data:Not applicable.11.1vMixtures:Not applicable.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.11.1lInformation on the likely routes of exposure (inhalation, ingestion, skin and eye contact):11.1mIngestion:May be harmful if swallowed.11.1nInhalation:May be harmful by inhalation.11.1oSkin contact:May cause skin irritation in suscepti11.1pEye contact:May cause eye irritation with suscepti11.1qSymptoms related to the physical, chemical and toxicological characteristics:No specific symptoms noted.11.1rDelayed and immediate effects as well as chronic effects from short and long term exposure:Not determined.11.1sNumerical measures of toxicity (such as acute toxicity estimates):Not determined.11.1tInteractive effects:Not determined.11.1uAbsence of specific data:Not applicable.	
11.1iSTOT-single exposure:Not determined.11.1jSTOT-repeated exposure:Not determined.11.1kAspiration hazard:Not determined.11.1lInformation on the likely routes of exposure (inhalation, ingestion, skin and eye contact):.11.1mIngestion:May be harmful if swallowed.11.1nInhalation:May be harmful by inhalation.11.1oSkin contact:May cause skin irritation in suscepti11.1pEye contact:May cause eye irritation with suscepti11.1qSymptoms related to the physical, chemical and toxicological characteristics:No specific symptoms noted.11.1rDelayed and immediate effects as well as chronic effects from short and long term exposure:Not determined.11.1sNumerical measures of toxicity (such as acute toxicity estimates):Not determined.11.1tInteractive effects:Not determined.11.1uAbsence of specific data:Not applicable.11.1wMixtures:Not applicable.11.1wMixture vs. substance information:Not applicable.	

Section 12 Classification by OSHA 13: Not classified.		Calcein AM SDS; Doc# F17-6696-2-A; Eff	fective: 07/26/16; Supersedes: None; Page 5 of 6
properties have not been thoroughly investigated. 2: Ecological Information			
Section 12: Ecological information 12.1 Toxicity: 12.19 Name: 12.2 Persistence and degradability: 13.2 Persistence and degradability: 13.4 Noticity in spirit. 13.5 Persistence and degradability: 13.6 Noticity in spirit. 13.6 Noticity in spirit. 13.7 Noticity in spirit. 13.8 Noticity in spirit. 13.9 Noticity in spirit. 13.1 Waste treatment methods: 13.1 Waste treatment methods: 13.1 Waste treatment methods: 13.1 Noticity in spirit. 13.1 Waste residues and information on their safe handling and methods of disposal, packaging: 13.1 Waste treatment methods: 13.1 Waste treatment methods: 13.2 Noticity in spirit. 13.3 Noticity in spirit. 13.4 Noticity in spirit. 13.4 Noticity in spirit. 13.5 Noticity in spirit. 13.6 Noticity in spirit. 13.6 Noticity in spirit. 13.7 Noticity in spirit. 13.8 Noticity in spirit. 13.8 Noticity in spirit. 13.9 Noticity in spirit. 13.1 Waste treatment methods: 13.1 Noticity in spirit. 13.2 Noticity in spirit. 13.3 Noticity in spirit. 13.4 Noticity in spirit. 13.4 Noticity in spirit. 13.5 Noticity in spirit. 13.6 Noticity in spirit. 13.7 Noticity in spirit. 13.8 Noticity in spirit. 13.9 Noticity in spirit. 13.1 Noticity in spirit. 13.1 Noticity in spirit. 13.2 Noticity in spirit. 13.3 Noticity in spirit. 13.4 Packing group: 14.5 Not spirit. 13.4 Packing group: 14.5 Noticity in spirit. 13.5 Noticity in spirit. 13.6 Noticity in spirit. 13.7 Noticity in spirit. 13.8 Noticity in spirit. 13.9 Noticity in spirit. 13.1 Noticity in spirit. 13.2 Noticity in spirit. 13.3 Noticity in spirit. 13.4 Noticity in spirit. 13.5 Noticity in spirit. 13.6 Noticity in spirit. 13.6 Noticity in spirit. 13.7 Noticity in spirit. 13.8 Noti	11.1ab	Other information:	
12.1a Name: 12.1b Isolate Calcain AM. 12.1b Ecotoxicity (squatic and terrestrial, where available) Not determined. 12.2 Persistence and degradability: 12.3 Bioaccumulative potential: 13.4 Mobility in soil and we've assessment: 14.5 Other adverse effects: 15.6 Other adverse effects: 15.7 Other adverse effects: 15.8 Other adverse effects: 15.1 Section 13: Disposal considerations 15.1 Section 14: Transport information on their safe handling and methods of disposal, including the disposal of any contaminated or recipantial and their safe handling and methods of disposal, including the disposal of any contaminated or recipantial and their safe handling and methods of disposal, including the disposal of any contaminated or recipantial and their safe handling and methods of disposal, including the disposal of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and methods of any contaminated or recipantial and their safe handling and personal protection of the safe handling and personal protection			properties have not been thoroughly investigated.
12.1a Name: 12.1b Intervention of the state of the safety process	Section	n 12: Ecological information	
12.16 Scotosciriy (aquatic and terrestrial, where available): There are no data on the degradability of this product.			
Persistence and degradability: There are no data on the degradability of this product.			Calcein AM.
No. data available on bioaccumulation.	12.1b	Ecotoxicity (aquatic and terrestrial, where available):	
Mobility in soil: No data available.			
12.5 Results of PBT and vPvB assesment: Not data available.			
Section 13: Disposal considerations 13.1 waste treatment methods: 13.1 Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 13.1 Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 13.1 The safe handling and methods of disposal, including the disposal of any contaminated packaging: 14.2 UN proper shipping name: 14.3 Transport information 14.4.1 UN number: 14.4.2 UN proper shipping name: 14.5 Packing group: 14.5 Particular disposal of any contaminated of the special production of the SDS. 14.6 Packing group: 14.5 Packing group: 14.5 Packing group: 14.5 Packing group: 14.5 Packing group: 14.6 Special precautions full by the special production of the special produ			
Section 13: Disposal considerations 13.11 Waste treatment methods: 13.1a Description of waste residues and information on the irrade handling and methods of disposal, including the disposal of any contaminated packaging: Section 14: Transport information 14.11 UN number: Not applicable. Not applicable. Not applicable. Not applicable. 14.5a Is revironmentally dangerous according to UN Model Regulations (IMDC Code, ADR, RID, and ADN)?: 14.5b Is it a marine pollutant according to HIMDG code? 14.7 Tonsport in bulk according to Annex II of MARPOL and the IBC code: 14.7 Other information 15.11 Safety, health and environmental regulations/spicial and environmental regulations/spicial and environmental regulations/spicial and environmental spicial spicial regulations/spicial and environmental spicial spicial regulations (MDC Scote): 15.10 USA Pernsylvania Right to Know: USA Pernsylvania Right to Know: 15.11 USA California Prop. 85 Components: USA Pernsylvania Right to Know: 15.12 USA Resistances of very high concern: 15.13 Custances of the spicial concerns of the substance or instances. 15.14 USA Pernsylvania Right to Know: 15.15 USA Pernsylvania Right to Know: 15.16 USA Pernsylvania Right to Know: 15.17 Calcasification references: 15.18 Custances of very high concern: 15.19 USA Row Jersey Right to Know: 15.10 USA Pernsylvania Right to Know: 15.11 Substances of very high concern: 15.12 Custances of very high concern: 15.13 Custances of very high concern: 15.14 Dust Pernsylvania Right to Know: 15.15 Custances of very high concern: 15.16 USA Pernsylvania Right to Know: 15.17 Custances of very high concern: 15.18 Custances of very high concern: 15.19 Custances of very high concern: 15.10 USA Pernsylvania Right to Know: 15.11 Custances of very high concern: 15.12 Custances of very high concern: 15.13 Custances of very high concern: 15.14 Custances of very high concern: 15.15 Custances of very high concern: 15.16 Custances of very high concern: 15.17 Custances of very high concern:			
13.1 Waste treatment methods:	12.0	Other adverse effects.	ino data available.
13.1 Waste treatment methods:	Section	n 13: Disposal considerations	
their safe handling and methods of disposal, including the disposal of any contaminated packaging: Section 14: Transport information 14:1 UN number: Not applicable. Not app		Waste treatment methods:	
including the disposal of any contaminated packaging: or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. Section 14: Transport information 14: UN number: Not applicable. 14: UN proper shipping name: Not applicable. 14: A Pransport hazard class(es): Not applicable. 14: A Pransport hazard class(es): Not applicable. 14: Environmental hazards: Not applicable. Not applicable. 14: Environmental hazards: Not applicable. Not applicable. 14: Environmental hazards: Not applicable. Not applicable. Not applicable. 14: Environmental hazards: Not applicable. No	13.1a		
Section 14: Transport information			
Section 14: Transport information 14.1 UN number: Not applicable.			
14.1 Un number:		packaging.	(exposure controls and personal protection) of the SDS.
14.2 Un number:	Section	n 14: Transport information	
14.4 Packing group: Not applicable.			Not applicable.
14.5	14.2		
14.5a			
14.5a Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)? 14.5b Is it a marine pollutant according to the IMDG code? 14.6c Special precautions for user:			Not applicable.
Model Regulations (IMDĞ Code, ADR, RÎD, and ADN)?: 14.5b Is it a marine pollutant according to the IMDG code?: 14.6 Special precautions for user: 14.7 Transport in bulk according to Annex II of MARPOL and the IBC code: 14.7a Other information: 15.1 Classification for other modes of transport: Section 15: Regulatory information 15.1 Regional safety, health and environmental regulations/Regislation specific for the substance or mixture: 15.1a Regional safety, health and environmental regulations/Regislation specific for the substance or mixture: 15.1b USA SARA Components (such as 302/311/313): 15.1c USA Pennsylvania Right to Know: 15.1d USA Pennsylvania Right to Know: 15.1e USA New Jersey Right to Know: 15.1e USA New Jersey Right to Know: 15.1e USA California Prop. 65 Components: 15.1f USA California Prop. 65 Components: 15.1g EU Regulation 1907/2006 (REACH): 15.1l USA California Prop. 65 Components: 15.1l Usubstances of very high concern: 15.1l Usu			No.
14.5b Is it a marine pollutant according to the IMDG code?: 14.6 Special precautions for user: None known.	14.5a	Model Regulations (IMDG Code, ADR, RID, and	INO.
14.7a Classification for other modes of transport:	14.5b	Is it a marine pollutant according to the IMDG code?:	No.
MARPOL and the IBC code: 14.7a			
14.7a Other information: The product is not considered a dangerous good for transport.	14.7		Not applicable.
Section 15: Regulatory information	4470		The ward set is not considered a degree on a degree of the transport
Section 15: Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture: Not classified. Regional safety, health and environmental regulations specific for the product in question: 15.1b USA SARA Components (such as 302/311/313): This product is not listed in the SARA (Superfund Amendments and Reauthorization Act). No components are subject to the Massachusetts Right to Know: No components are subject to the Massachusetts Right to Know Act. 15.1d USA Pennsylvania Right to Know: Calcein O, O'diacetate tetrakis (acetoxymethyl) ester; CAS-No. 148504-34-1 15.1e USA California Prop. 65 Components: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. 15.1g EU Regulation 1907/2006 (REACH): The product nor any components are identified. 15.1h Annex XIV substances subject to authorization: The product nor any components are identified. 15.1i Substances of very high concern: The product nor any components are identified. 15.1k Guidance notes: Workplace exposure limits EH40. EU legislation references: Workplace exposure limits EH40. EC) No. 1272/2008 on the classification, labelling and packaging of substances and preparations. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 comerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 799/45/EC and 2000/21/EC, including amendments.			
Safety, health and environmental regulations/legislation specific for the substance or mixture: Not classified.	11.70	Clacomodulor for other modes of transport.	Contact cuppinor.
regulations/legislation specific for the substance or mixture: 15.1a Regional safety, health and environmental regulations specific for the product in question: 15.1b USA SARA Components (such as 302/311/313): 15.1c USA Massachusetts Right to Know: 15.1d USA Pennsylvania Right to Know: 15.1e USA New Jersey Right to Know: 15.1f USA California Prop. 65 Components: 15.1g EU Regulation 1907/2006 (REACH): 15.1h Annex XIV substances subject to authorization: 15.1j Approved code of practice: 15.1k Guidance notes: 15.1k Guidance notes: 15.1l Use gislation references: 15.1l EU legislation references: 15.1l EU legislation references: 15.1l Regulation Regulation Regulation, EC 830/2015. Regulation, EC 830/2015. Regulation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 76/769/EEC and repealing Council Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and 2000/21/EC, including amendments.	Section	n 15: Regulatory information	
15.1a Regional safety, health and environmental regulations specific for the product in question: 15.1b USA SARA Components (such as 302/311/313): This product is not listed in the SARA (Superfund Amendments and Reauthorization Act). No components are subject to the Massachusetts Right to Know Act. 15.1c USA Massachusetts Right to Know: No components are subject to the Massachusetts Right to Know Act. 15.1d USA Pennsylvania Right to Know: Calcein O,O'diacetate tetrakis (acetoxymethyl) ester; CAS-No. 148504-34-1 15.1f USA California Prop. 65 Components: Calcein O,O'diacetate tetrakis (acetoxymethyl) ester; CAS-No. 148504-34-1 15.1g EU Regulation 1907/2006 {REACH}: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. 15.1g EU Regulation 1907/2006 {REACH}: The product nor any components are identified. 15.1i Annex XIV substances subject to authorization: The product nor any components are identified. 15.1i Approved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. 15.1k Guidance notes: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation). EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 193/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/67/EEC, and 2000/21/EC, including amendments.	15.1		
15.1a Regional safety, health and environmental regulations specific for the product in question: 15.1b USA SARA Components (such as 302/311/313): This product is not listed in the SARA (Superfund Amendments and Reauthorization Act). No components are subject to the Massachusetts Right to Know: No components are subject to the Massachusetts Right to Know Act. 15.1d USA Pennsylvania Right to Know: Calcein O,O'diacetate tetrakis (acetoxymethyl) ester; CAS-No. 1448504-34-1 15.1f USA California Prop. 65 Components: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. 15.1g EU Regulation 1907/2006 {REACH}: The product nor any components are identified. 15.1h Annex XIV substances subject to authorization: The product nor any components are identified. 15.1j Approved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. 15.1l Guidance notes: Workplace exposure limits EH40. 15.1l EU legislation references: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation). EC 830/2015. Regulation (EC) No 1907/606 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 1488/94 as well as Council Directive 76/768/EC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
regulations specific for the product in question: 15.1b USA SARA Components (such as 302/311/313): This product is not listed in the SARA (Superfund Amendments and Reauthorization Act). 15.1c USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: 15.1e USA New Jersey Right to Know: USA Caliein O, O'diacetate tetrakis (acetoxymethyl) ester; CAS-No. 148504-34-1 15.1f USA California Prop. 65 Components: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. 15.1g EU Regulation 1907/2006 {REACH}: The product nor any components are identified. 15.1h Annex XIV substances subject to authorization: The product nor any components are identified. 15.1j Approved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. 15.1k Guidance notes: EU legislation references: Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation), EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.	15.10		Not classified
15.1b	15.1a		Not classified.
15.1d USA Pennsylvania Right to Know: 15.1e USA New Jersey Right to Know: 15.1f USA California Prop. 65 Components: 15.1g EU Regulation 1907/2006 {REACH}: 15.1l Annex XIV substances subject to authorization: 15.1j Approved code of practice: 15.1l Guidance notes: 15.1l	15.1b		
148504-34-1 15.1e USA New Jersey Right to Know: Calcein O,O'diacetate tetrakis (acetoxymethyl) ester; CAS-No. 148504-34-1 15.1f USA California Prop. 65 Components: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. 15.1g EU Regulation 1907/2006 {REACH}: The product nor any components are identified. 15.1h Annex XIV substances subject to authorization: The product nor any components are identified. 15.1i Substances of very high concern: The product nor any components are identified. 15.1j Aproved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. 15.1k Guidance notes: Workplace exposure limits EH40. 15.1l EU legislation references: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}, EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
15.1f USA California Prop. 65 Components: This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm. The product nor any components are identified. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. EU legislation references: Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.		·	148504-34-1
California to cause cancer and/or reproductive harm. 15.1g EU Regulation 1907/2006 {REACH}: The product nor any components are identified. 15.1h Annex XIV substances subject to authorization: The product nor any components are identified. 15.1i Substances of very high concern: The product nor any components are identified. 15.1j Approved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. 15.1k Guidance notes: Workplace exposure limits EH40. 15.1l EU legislation references: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/105/EC and 2000/21/EC, including amendments.			148504-34-1
15.1h Annex XIV substances subject to authorization: 15.1i Substances of very high concern: 15.1j Approved code of practice: 15.1j Approved code of practice: 15.1k Guidance notes: 15.1l EU legislation references: 15.1l Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.		·	California to cause cancer and/or reproductive harm.
15.1i Substances of very high concern: The product nor any components are identified. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. EU legislation references: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
15.1j Approved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. EU legislation references: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
for supply. Safety data sheets for substances and preparations. 15.1k Guidance notes: Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
EU legislation references: (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.		·	for supply. Safety data sheets for substances and preparations.
substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
(EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.	10.11	20 logiciation foroionoso.	
Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			(EC) No 1907/2006 of the European Parliament and of the Council of
European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.			
2000/21/EC, including amendments.			
	15.2	Chemical safety assessment:	

Calcein AM SDS; Doc# F17-6696-2-A; Effective: 07/26/16; Supersedes: None; Page 6 of 6

15.2a	Other regulatory information:	None.
Soction	16: Other information	
Section 16.1	Other information:	
6.1a	Date of revision:	07/26/16
6.1b	SDS number and revision:	F17-6696-2-A
6.1c	Supersedes SDS number and revision:	None.
	Changes made to the previous version of the SDS:	No previous versions. SDS formatted to comply with EC 1272/2008
16.1d 16.1e	Changes made to the previous version of the SDS: Key/legend to abbreviations and acronyms used in the SDS:	No previous versions. SDS formatted to comply with EC 1272/2008 CLP regulations, EC 830/2015. ACGIH American Conference of Governmental Industrial Hygienists. ADN European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway. ADR The European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE Acute Toxicity Estimate. BCF Bio Concentration Factor. CAS Chemical Abstracts Service. CLP Classification, Labelling and Packaging. CMR Carcinogen, Mutagen or Reproductive toxicant. COD Chemical Oxygen Demand. EC European Commission. EC50 Half maximal effective concentration. EH40 Resource containing the list of workplace exposure limits for us with the Control of Substances Hazardous to Health Regulations. EINECS European Inventory of Existing Commercial chemical Substances. ELINCS European List of Notified Chemical Substances. EU European Union. GHS Globally Harmonized System of Classification and Labelling of Chemicals. H Statement GHS Hazard statement. IATA International Air Transport Association. IBC Intermediate Bulk Container. IC50 Half maximal inhibitory concentration. IMDG International Maritime Dangerous Goods. LC50 Median lethal concentration. LD50 Median lethal dose. LogPow logarithm of the octanol/water partition coefficient. MARPOL 73/78 International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. OEL Occupational Exposure Limit. OSHA Occupational Safety and Health Administration (USA). PBT Persistent, Bioaccumulative, and Toxic. PEL Permissible Exposure Limit. RID The Regulations concerning the International Carriage of Dangerous Goods by Rail. SADT Self-Accelerating Decomposition Temperature. SARA Superfund Amendments and Reauthorization Act. SCBA Self-Contained Breathing Apparatus. SDS Safety Data Sheet. STOT-RE Specific Target Organ Toxicity - Repeated Exposure. UN United Nations.
		USA United States of America.
		vPvB very Persistent very bioaccumulative.
16.1f	Full text of hazard statements and/or precautionary	All statements were written out in full.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

END OF SDS



SAFETY DATA SHEET (SDS) according to Regulation (EC) No. 830/2015 amending 1907/2006

1.1	Product identifier:	7-Aminoactinomycin D		
1.1a	Other means of identification:			
l.1b	Alternative product name(s)/ synonyms:	7-aminoactinomycin D; 7-AAD.		
.1c	Product number/Catalog #(s):	5121, 6163		
.1d	Internal identification:	7-AAD; 7AAD		
.2	Relevant identified uses of the substance or mixture and uses advised against:	For research use only. Not for use in diagnostic procedures.		
.2a	Brief description of what the substance or mixture is	Live cell impermeant red fluorescence-emitting DNA dye for assessin		
	intended to do:	cell viability.		
.3	Details of the supplier of the SDS:			
.3a	Name:	ImmunoChemistry Technologies, LLC (ICT)		
.3b	Address:	9401 James Avenue South, Suite 155		
.3c	City, State, Zip, Country	Bloomington, MN 55431-2500 USA		
.3d	Phone number:	1-800-829-3194 and 952-888-8788		
.3e	Fax number:	952-888-8988		
1.3f	Website:	www.immunochemistry.com		
1.3g	Email:	help@immunochemistry.com		
.3h	Contact person at ICT:	Quality Documentation Department		
1.4	Emergency telephone number:	ICT: 1-800-829-3194 (USA & Canada) or 952-888-8788 world wide;		
	_ , .	ICT hours are 9 am-5 pm central time USA, Monday through Friday		
		(excluding holidays). Chemtrec 24-hour access within USA and		
		Canada: 1-800-424-9300 or +1 703-527-3887. Collect calls accepted		
	on 2: Hazards identification			
2.1	Classification of the substance or mixture:	Out at a second		
2.1a	Product is a:	Substance.		
2.1b	Classification according to (EC) No. 1272/2008	Acute Tox. 1 (oral) H300.		
	{CLP}:	Carc. 1A. (oral) H350.		
2.4	T	Repr. 1A. (unborn child) H360D		
2.1c	The most important adverse physiochemical, human	Refer to Sections 9-12.		
	health, and environmental effects: Label elements:			
2.2				
2.2a	GHS label elements, including precautionary statements:	•		
2.2b	Contains:	7-aminoactinomycin D		
2.2c	Labeling in accordance with (EC) No. 1272/2008:			
2.2d	Hazard Pictograms (Hazard Symbols):	- • — • —		
		GHS06 Skull and crossbones. GHS08 Health Hazard		
2.2e	Signal word:	Danger.		
2.2f	Hazard statements:	H300 Fatal if swallowed.		
		H350 May cause cancer if swallowed.		
		H360D May damage the unborn child if swallowed.		
2.2g	Precautionary statements:	P201 Obtain special instructions before use.		
	_	P280 Wear protective gloves/protective clothing/eye protection/face		
		protection.		
		P308 + P313 IF exposed or concerned: Get medical advice/attention. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P405 Store locked up.		
		P501 Dispose of contents/container to an approved waste disposal plant.		
2.2h	Supplementary precaution statements:			

7-Aminoactinomycin D SDS; Doc# F17-5121-2-B; Effective: 08/04/2017; Supersedes: F17-5121-2-A; Page 2 of 7

2.3	Other hazards:	11 D 3D3; DOC# F17-5121-2-B;	No additional infor	'; Supersedes: F17-5121-2-A; Page 2 of 7
2.3a	Does the chemical meet the	e criteria for PRT or vPvR2	Not applicable.	malion avaliable.
2.3b	Other hazards which do not result in classification:		No information ava	ailable.
2.00	Caret Hazarde Willert de He	roodit iii olaooiiloatioii.	110 111101111411011410	andoro.
	on 3: Composition/informati	on on ingredients		
3.1	Substance:		Item is a substance	e.
	3.1a Chemical identity:		7-AAD	
	3.1b Common name, synor	nyms, etc.:	7-aminoactinomyc	
	3.1c CAS number and other unique identifiers:	3.1d EC number:	3.1e % Concentration:	3.1f Classification according to (EC) No. 1272/2008 {CLP}:
	7240-37-1	635-285-6	100%	Acute Tox. 1, H300
				Carc. 1A, H350 (oral)
				Repr. 1A, H360D (Unborn child) (oral)
3.1g	Chemical identity of any impurity, stabilizing additive, or individual constituent other than the main constituent, which is itself classified and which contributes to the classification (such as product identifier, trade name, identification numbers):		None known.	
3.1h	Other information on the su	bstance:	Chemical Formula Molecular Weight:	
3.2	Mixture:		Item is a substance	e, therefore Section 3.2 is not applicable; see
J.2	The chemical identity and c	concentration or	Section 3.1.	5, 1 51010 5001.011 0.12 to 1101 applicable, 500
	concentration ranges of all	ingredients which are		
	hazardous and are present	above their cut-off levels:		
Section	on 4: First aid measures			
4.1	Description of first aid me	easures:	If concerned, get n	nedical attention/advice and provide physician with
	•		SDS information. N	Move out of dangerous area. Wash contaminated
4.4-	labalatian.			ise. Never give anything to an unconscious person.
4.1a	Inhalation:			ackaging the risk of inhalation is minimal. Remove to at rest in a comfortable position for breathing. If not
				ificial respiration. Rinse nose and mouth with water.
			Get medical attent	ion if any discomfort continues.
4.1b	Skin contact:			hly with soap and water for several minutes;
				or at least 15 minutes. Remove any contaminated sand wash thoroughly before reuse. Get medical
			attention if any disc	
4.1c	Eye contact:			es with plenty of water while lifting the eyelids. Make
			sure to remove any	y contact lenses from the eyes before rinsing.
				or at least 15 minutes. Get medical attention if any
4.1d	Ingestion:		Get modical attent	es. ion immediately. Call a poison center or physician.
4.10	ingestion.			UNCONSCIOUS PERSON VOMIT OR DRINK
				buth thoroughly. Do not induce vomiting without
			advice from poisor	n control center or medical professional.
4.2	Most important symptom	s and effects, both acute		Refer to Sections 2 and 11 for most important
	and delayed:			and effects. The severity of the symptoms will vary concentration and length of exposure.
4.2a	Inhalation:		None known.	consolitation and longin of exposure.
4.2b	Skin contact:		None known.	
4.2c	Eye contact:		None known.	
4.2d	Ingestion:	7 P 1 22 25 25 25	Fatal if swallowed.	
4.3	Indication of any immedia special treatment needed		in case of accident	d measures noted, but first aid may still be required tal exposure, inhalation, or ingestion of this product. dical attention promptly!
4.3a	Notes to physician/first resp	oonder:		cally. Refer to Sections 5-8 for advice on personal
	, ,		protective equipme	·
Section	on 5: Firefighting measures			
5.1	Extinguishing media:		Use fire-extinguish	ing media appropriate for the surrounding materials.
5.1a	Suitable extinguishing med		Water spray, foam	, dry powder, or carbon dioxide.
5.1b 5.2	Unsuitable extinguishing n Special hazards arising	nedia: from the substance or	None known.	
F 0-	mixture:	aduata	In coop of fire too!	a good may be formed of some a magneticle (00)
5.2a	Hazardous combustion pro		carbon dioxide (CC	c gases may be formed of carbon monoxide (CO), D ₂ ; CO _x) and nitrogen oxides (NO ₂ ; NO _x).
5.2b	Unusual fire & explosion h	azards:	Product is not expl conditions of use.	losive. No dangerous reactions known under normal
5.2c	Protective measures in fire):		ipment appropriate for surrounding materials.
			, , , , , , , , , , , , , , , , , , , ,	, <u>, , , , , , , , , , , , , , , , , , </u>

7-Aminoactinomycin D SDS; Doc# F17-5121-2-B; Effective: 08/04/2017; Supersedes: F17-5121-2-A; Page 3 of 7

5.3	Advice for firefighters:						
5.3a	Special firefighting procedures:	No specific firefighting procedure given.					
5.3b	Special protective equipment and precautions for	Wear full protective clothing, including self-contained breathing					
	firefighters:	apparatus, if necessary. The product presents no special fire hazards					
		in normal use.					
Section	Section 6: Accidental release measures						
6.1	Personal precautions, protective equipment, and						
	emergency procedures:						
6.1a	General release measures:	No specific emergency measures are required other than good					
		laboratory hygiene and safety practices for small spills. Wear suitable					
		protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8).					
6.1b	Advice for non-emergency personnel; personal	No specific emergency measures are required other than good					
0.15	precautions, protective equipment and emergency	laboratory hygiene and safety practices. Wear suitable protective					
	procedures:	clothing/gloves/eye/face protection to avoid contact with skin, eyes,					
		and personal clothing; use an approved supplied-air respirator, in case					
		of emergency (also refer to Section 8). Ensure adequate ventilation					
		and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and					
		eye or face protection to prevent any contamination. Consult					
		professional emergency personnel if concerned.					
6.1c	Advice for emergency responders; personal	Wear suitable protective clothing, gloves and eye or face protection to					
	precautions, protective equipment and emergency	avoid contact; use an approved supplied-air respirator, in case of					
6.2	procedures: Environmental precautions:	emergency (also refer to Section 8).					
6.2	Methods and materials for containment and	Do not allow to enter drains, sewers, or watercourses. Avoid dust formation. Contain any spills with dikes or absorbent					
0.0	clean up:	materials to prevent migration and entry into sewers or water sources.					
		Place in a suitable container for disposal in accordance with local					
		waste regulations (see Section 13). Wash spill area thoroughly with					
		plenty of soap and water. Avoid contact with skin or inhalation of					
6.4	Reference to other sections:	spillage, dust, or vapor. Refer to Sections 8 and 13 for additional information.					
0.4	Reference to other sections.	Refer to Sections 8 and 13 for additional information.					
Section	n 7: Handling and storage						
7.1	Precautions for safe handling:	Do not handle until all safety precautions have been read and					
		understood. Avoid creation of aerosol/mist/dust. Avoid inhalation of					
		vapors/mist/dust. Prevent contact with skin and eyes. Use appropriate					
		personal protection equipment (PPE). Thoroughly wash hands and contaminated areas with water and soap before leaving the work site.					
		Avoid exposure during pregnancy.					
7.1a	Prevent handling of incompatible substances or	Not known.					
	mixtures:						
7.1b	Advice on general occupational hygiene:	Do not eat, drink, or smoke in work areas. Wash hands after use.					
		Remove contaminated clothing and protective equipment before entering eating areas. Good personal hygiene is necessary. Follow					
		good laboratory hygiene and safety practices.					
7.2	Conditions for safe storage, including any	Refer to product label. Store in cool place. Protect from light. Store at					
	incompatibilities:	specified temperature. Keep container tightly closed in a dry and well-					
		ventilated place. Containers which are opened must be carefully					
		resealed and kept upright to prevent leakage. Avoid spills and release					
7.3	Specific end use(s):	into the environment; keep away from watercourses. For research use only. Not for use in diagnostic procedures.					
7.5	באסטווים טווע עטטנטן:	1 3. 1000a.on 400 only. Hot for 400 in diagnostic procedures.					
	1 8: Exposure controls/personal protection						
8.1	Control parameters:	<u> </u>					
8.1a	Occupational exposure limits, such as chemical	No data available.					
	identity, standard, TWA-8 hours (time weighted average), STEL-15 minutes (short term exposure						
	limit), etc.: WEL = Workplace Exposure Limit. Sk =						
	can be absorbed through skin.						
8.1b	Appropriate engineering controls:	Ensure adequate ventilation, especially in confined areas.					
8.1c	Individual protection measures, such as personal	Wear gloves. Wear labcoat with full coverage clothing. Wear chemical					
0 1 7	protective equipment:	goggles and face shield in combination.					
8.1d	Safety symbols:						
8.2	Exposure controls:						
0.2	Exposure controls.						

7-Aminoactinomycin D SDS; Doc# F17-5121-2-B; Effective: 08/04/2017; Supersedes: F17-5121-2-A; Page 4 of 7

	D Pro	D :1
8.2a	Process conditions:	Provide eyewash station.
8.2b	Engineering controls:	Local exhaust ventilation is recommended for providing adequate
	J	ventilation. Ensure that eyewash stations and safety showers are
		proximal to the workstation location.
8.2c	Ventilation controls:	Provide adequate ventilation.
8.2d	Reference to other sections:	Refer to Section 5 for additional information.
8.2e	Eye/face protection:	Eye protection, including both chemical splash goggles and face
0.26	Eyenade protection.	
		shield, must be worn when possibility exists for eye contact due to
		spraying liquid or airborne particles.
8.2f	Skin protection:	Lab coat. Wear suitable protective clothing. Wear long sleeves.
8.2g	Hand protection:	Use gloves chemically resistant to this material when prolonged or
		repeated contact could occur. Gloves should be classified under
		Standard EN 374 or ASTM F1296. Suggested glove materials are:
		Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol
		laminate, PVC or vinyl.
8.2h	Respiratory equipment:	Where excessive vapor, mist, or dust may result, use NIOSH approved
	, , , , ,	respiratory protection equipment.
0.0:	Other protection.	
8.2i	Other protection:	Wear appropriate clothing to prevent any possibility of skin contact.
8.2j	Hygiene measures:	DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift
-		and before eating, smoking, and using the toilet. Promptly remove any
		clothing that becomes contaminated. Use appropriate skin cream to
		prevent drying of skin. When using do not eat, drink, or smoke. Wash
		promptly with soap and water if skin becomes contaminated.
8.2k	Thermal hazards:	None known.
8.21	Environmental exposure controls:	Not determined.
Section	n 9: Physical and chemical properties	
9.1	Information on basic physical and chemical	
3.1		•
	properties:	
9.1a	Appearance (physical state, color, etc.):	Powder, dust; varying color.
9.1b	Odor:	No characteristic odor.
9.1c	Odor threshold:	Not determined.
9.1d	pH:	Not determined.
9.1e	Melting point/freezing point (°C):	Not determined.
9.1f	Initial boiling point and boiling range:	Not determined.
9.1g	Flash point (°C):	Not applicable.
	Evaporation rate:	Not applicable.
y,in		
9.1h		
9.1i	Flammability (solid, gas):	Not determined.
9.1i 9.1j	Flammability (solid, gas): Upper/lower flammability or explosive limits:	Not determined. Not determined.
9.1i	Flammability (solid, gas):	Not determined. Not determined.
9.1i 9.1j 9.1k	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure:	Not determined. Not determined. Not applicable.
9.1i 9.1j 9.1k 9.1l	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1):	Not determined. Not applicable. Not applicable.
9.1i 9.1j 9.1k	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density:	Not determined. Not determined. Not applicable.
9.1i 9.1j 9.1k 9.1l	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1):	Not determined. Not applicable. Not applicable.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies):	Not determined. Not applicable. Not applicable. Not determined. Not determined. Not determined. No data available.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water):	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C):	Not determined. Not applicable. Not applicable. Not determined. Not determined. Not determined. No data available. Not determined. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water):	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C):	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined. Not determined. Not determined. Not determined. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity:	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties:	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties:	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties:	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties:	Not determined. Not applicable. Not applicable. Not determined. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined. Not not determined. Not not determined. None. None.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined. Not none. None.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined. Stable under normal temperature conditions.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined. Not none. None.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. Not determined. Not determined. None. None. None. Hone.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. Not determined. None. None. None. Avoid exposure to high temperatures or direct sunlight. Hygroscopic;
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3 10.4	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3 10.4	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. Not determined. None. None. None. Avoid exposure to high temperatures or direct sunlight. Hygroscopic;
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3 10.4	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3 10.4	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3 10.4	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.2 9.2a Section 10.1 10.2 10.3 10.4 Section	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products:	Not determined. Not applicable. Not applicable. Not determined. None. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 9.2a Section 10.1 10.2 10.3 10.4	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products:	Not determined. Not applicable. Not applicable. Not determined. None. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.2 9.2a Section 10.1 10.2 10.3 10.4 Section	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 10.2 10.3 10.4 10.5 10.6 Sectior 11.1	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 10.2 10.3 10.4 10.5 10.6 Sectior 11.1	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects: Name:	Not determined. Not applicable. Not applicable. Not determined. None. None. None. None. Brace of small quanity, the health hazard is small. Knowledge about health hazard is incomplete. 7-aminoactinomycin D
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 10.2 10.3 10.4 10.5 10.6 Sectior 11.1	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. Not determined. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete.
9.1i 9.1j 9.1k 9.1l 9.1n 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.1t 9.2 10.1 10.2 10.3 10.4 10.5 10.6 Sectior 11.1 11.1a 11.1b	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects: Name: Acute toxicity:	Not determined. Not applicable. Not applicable. Not determined. None. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete. 7-aminoactinomycin D No specific data available. See Section 2 for classification.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.21 10.1 10.2 10.3 10.4 10.5 10.6 Section 11.1 11.1a 11.1b 11.1c	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects: Name: Acute toxicity: Skin corrosion/irritation:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. None. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete. 7-aminoactinomycin D No specific data available. See Section 2 for classification. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.21 10.1 10.2 10.3 10.4 10.5 10.6 Sectior 11.1 11.1a 11.1b 11.1c 11.1d	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects: Name: Acute toxicity: Skin corrosion/irritation: Serious eye damage/irritation:	Not determined. Not applicable. Not applicable. Not determined. No data available. Not determined. None. None. None. None. None. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete. T-aminoactinomycin D No specific data available. See Section 2 for classification. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.21 10.1 10.2 10.3 10.4 10.5 10.6 Section 11.1 11.1a 11.1b 11.1c	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects: Name: Acute toxicity: Skin corrosion/irritation:	Not determined. Not applicable. Not applicable. Not determined. Not not determined. None. None. None. None. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete. 7-aminoactinomycin D No specific data available. See Section 2 for classification. Not determined.
9.1i 9.1j 9.1k 9.1l 9.1m 9.1n 9.1n 9.1o 9.1p 9.1q 9.1r 9.1s 9.21 10.1 10.2 10.3 10.4 10.5 10.6 Sectior 11.1 11.1a 11.1b 11.1c 11.1d	Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapor pressure: Vapor density (Air =1): Relative density: Solubility(ies): Partition coefficient (N-octanol/water): Auto-ignition temperature (°C): Decomposition temperature (°C): Viscosity: Explosive properties: Oxidizing properties: Other information: Other physical or chemical parameters: 10: Stability and reactivity Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: 11: Toxicological information Information on toxicological effects: Name: Acute toxicity: Skin corrosion/irritation: Serious eye damage/irritation:	Not determined. Not applicable. Not applicable. Not determined. Not data available. Not determined. None. None. None. None. Bo data available. Stable under normal temperature conditions. Hazardous polymerization will not occur. Avoid exposure to high temperatures or direct sunlight. Hygroscopic; keep container tightly closed. Strong oxidizing substances. Strong acids. Strong bases. No data available. Because of small quanity, the health hazard is small. Knowledge about health hazard is incomplete. 7-aminoactinomycin D No specific data available. See Section 2 for classification. Not determined. Not determined.

7-Aminoactinomycin D SDS; Doc# F17-5121-2-B; Effective: 08/04/2017; Supersedes: F17-5121-2-A; Page 5 of 7

11.1g		
	Carcinogenicity:	No specific data available. See Section 2 for classification.
11.1h	Reproductive toxicity:	No specific data available. See Section 2 for classification.
11.1i	STOT-single exposure:	Not determined.
1.1j	STOT-repeated exposure:	Not determined.
11.1k	Aspiration hazard:	Not determined.
11.11	Information on the likely routes of exposure	May enter by ingestion; skin and/or eye contact; inhalation of
1 1. 11	(inhalation, ingestion, skin and eye contact):	vapors/mist/dust.
44.4		
11.1m	Ingestion:	Fatal if swallowed.
11.1n	Inhalation:	Not determined.
11.1o	Skin contact:	Not determined.
11.1p	Eye contact:	Not determined.
11.1q	Symptoms related to the physical, chemical and	No specific symptoms noted.
	toxicological characteristics:	
11.1r	Delayed and immediate effects as well as chronic	Carcinogenicity: May cause cancer if swallowed. Risk of cancer
	effects from short and long term exposure:	depends on duration and level of exposure.
	enects from short and long term exposure.	Teratogenicity: May damage the unborn child if swallowed.
44.4-	Niver seizel and a service of the delta for the service	
11.1s	Numerical measures of toxicity (such as acute	Not determined.
	toxicity estimates):	
11.1t	Interactive effects:	Not determined.
11.1u	Absence of specific data:	Not applicable.
11.1v	Mixtures:	Not applicable.
11.1w	Mixture vs. substance information:	Not applicable.
11.1w	Classification by National Toxicity Program (NTP):	Not classified.
11.1y	Classification by International Agency for Research	Not classified.
	on Cancer (IARC):	
11.1z	Classification by OSHA 13:	Not classified.
11.1ab	Other information:	None.
Section	n 12: Ecological information	
12.1	Toxicity:	
12.1a	Name:	7-aminoactinomycin D.
12.1b	Ecotoxicity (aquatic and terrestrial, where available):	Not determined.
12.2	Persistence and degradability:	There are no data on the degradability of this product.
12.3	Bioaccumulative potential:	No data available on bioaccumulation.
12.4	Mobility in soil:	
		No data available on mobility in soil.
12.5	Results of PBT and vPvB assessment:	No data available on mobility in soil. Not determined.
12.5	Results of PBT and vPvB assessment:	Not determined.
12.5 12.6	Results of PBT and vPvB assessment: Other adverse effects:	Not determined.
12.5 12.6 Section	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations	Not determined. Not determined.
12.5 12.6	Results of PBT and vPvB assessment: Other adverse effects:	Not determined. Not determined. When handling waste, consideration should be made to the safety
12.5 12.6 Section	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as
12.5 12.6 Section 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste.
12.5 12.6 Section	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority
12.5 12.6 Section 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal,	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling
12.5 12.6 Section 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8
12.5 12.6 Section 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal,	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling
12.5 12.6 Sectior 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8
12.5 12.6 Section 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8
12.5 12.6 Section 13.1 13.1a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS.
12.5 12.6 Section 13.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D).
12.5 12.6 Section 13.1 13.1a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D).
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es):	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1
12.5 12.6 Section 13.1 13.1a Section 14.1	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II . No.
12.5 12.6 Section 13.1 13.1a 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?: Is it a marine pollutant according to the IMDG code?:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated at controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II No.
12.5 12.6 Section 13.1 13.1a 13.1a 14.1 14.2 14.3 14.4 14.5 14.5a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?: Is it a marine pollutant according to the IMDG code?: Special precautions for user:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II No.
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?: Is it a marine pollutant according to the IMDG code?: Special precautions for user: Transport in bulk according to Annex II of	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II No.
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a 14.5b	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?: Is it a marine pollutant according to the IMDG code?: Special precautions for user: Transport in bulk according to Annex II of MARPOL and the IBC code:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II No. No. None known. Not applicable.
12.5 12.6 Section 13.1 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a 14.5b	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?: Is it a marine pollutant according to the IMDG code?: Special precautions for user: Transport in bulk according to Annex II of MARPOL and the IBC code: Other information:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II IMDG: II . No. No. None known. Not applicable.
12.5 12.6 Section 13.1 13.1a 13.1a Section 14.1 14.2 14.3 14.4 14.5 14.5a 14.5b	Results of PBT and vPvB assessment: Other adverse effects: 13: Disposal considerations Waste treatment methods: Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: 14: Transport information UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards: Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?: Is it a marine pollutant according to the IMDG code?: Special precautions for user: Transport in bulk according to Annex II of MARPOL and the IBC code:	Not determined. Not determined. When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste to be treated as controlled waste. Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS. ADR/RID/ADN: 3462 IMDG: 3462 ADR/RID: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). IMDG: Toxins extracted from living sources, solid, NOS (7-aminoactinomycin D). ADR/RID/ADN: Class 6.1: toxic substances IMDG: Class 6.1 ADR/RID/ADN: II IMDG: II . No. No. None known. Not applicable.

7-Aminoactinomycin D SDS; Doc# F17-5121-2-B; Effective: 08/04/2017; Supersedes: F17-5121-2-A; Page 6 of 7

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture:	. Effective: 08/04/2017, Supersedes: F17-3121-2-A, Fage 6 01 7
15.1a	Regional safety, health and environmental regulations specific for the product in question:	
15.1b	USA SARA Components (such as 302/311/313):	This product is not listed in the SARA (Superfund Amendments and Reauthorization Act).
15.1c 15.1d	USA Massachusetts Right to Know: USA Pennsylvania Right to Know:	Not listed. 7-aminoactinomycin D (CAS # 7240-37-1) is listed.
15.1d 15.1e	USA New Jersey Right to Know:	7-aminoactinomycin D (CAS # 7240-37-1) is listed. 7-aminoactinomycin D (CAS # 7240-37-1) is listed.
15.1f	USA California Prop. 65 Components:	This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.
15.1g 15.1h	EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization:	Not listed.
15.1n 15.1i	Substances of very high concern:	Not listed.
15.1j	Approved code of practice:	Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations.
15.1k	Guidance notes:	Workplace exposure limits EH40.
15.11	EU legislation references:	(EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
15.2	Chemical safety assessment:	No chemical safety assessment has been carried out.
15.2a	Other regulatory information:	None.
Section	n 16: Other information	
16.1	Other information:	
16.1a	Date of revision:	08/04/2017
16.1b	SDS number and revision:	F17-5121-2-B
16.1c 16.1d	Supersedes SDS number and revision: Changes made to the previous version of the SDS:	F17-5121-2-A Updated to comply with EC 1272/2008 CLP regulations, EC 830/2015.
16.1e	Key/legend to abbreviations and acronyms used in the SDS:	ACGIH American Conference of Governmental Industrial Hygienists. ADN European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway. ADR The European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE Acute Toxicity Estimate. BCF Bio Concentration Factor. CAS Chemical Abstracts Service. CLP Classification, Labelling and Packaging. CMR Carcinogen, Mutagen or Reproductive toxicant. COD Chemical Oxygen Demand. EC European Commission. EC50 Half maximal effective concentration. EH40 Resource containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations. EINECS European Inventory of Existing Commercial chemical Substances. ELINCS European List of Notified Chemical Substances. EU European Union. GHS Globally Harmonized System of Classification and Labelling of Chemicals. H Statement GHS Hazard statement. IATA International Air Transport Association. IBC Intermediate Bulk Container. IC50 Half maximal inhibitory concentration. IMDG International Maritime Dangerous Goods. LC50 Median lethal concentration. LD50 Median lethal dose. LogPow logarithm of the octanol/water partition coefficient. MARPOL 73/78 International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. OEL Occupational Exposure Limit. OSHA Occupational Safety and Health Administration (USA). PBT Persistent, Bioaccumulative, and Toxic.

		7-Aminoactinomycin D SDS; Doc# F17-5121-2-B	; Effective: 08/04/2017; Supersedes: F17-5121-2-A; Page 7 of 7		
			PEL Permissible Exposure Limit. RID The Regulations concerning the International Carriage of Dangerous Goods by Rail. SADT Self-Accelerating Decomposition Temperature. SARA Superfund Amendments and Reauthorization Act. SCBA Self-Contained Breathing Apparatus. SDS Safety Data Sheet. STOT Specific Target Organ Toxicity. STOT-RE Specific Target Organ Toxicity - Repeated Exposure. STOT-SE Specific Target Organ Toxicity - Single Exposure. UN United Nations. USA United States of America. vPvB very Persistent very bioaccumulative.		
16.1f		tt of hazard statements and/or precautionary ents not written out in full elsewhere:	All statements were written out in full.		
DISCLAIMER: This information relates only to the specin combination with any other materials knowledge and belief, accurate and relial representation is made to its accuracy, re		This information relates only to the speci in combination with any other materials o knowledge and belief, accurate and reliab	fic material designated and may not be valid for such material used or in any process. Such information is, to the best of the company's ple as of the date indicated. However, no warranty guarantee or eliability, or completeness. It is the user's responsibility to satisfy mation for his own particular use.		
	END OF SDS				



SAFETY DATA SHEET (SDS) according to Regulation (EC) No. 830/2015 amending 1907/2006

1.1	n 1: Identification of the substance/mixture and of the Product identifier:	
		10X Cellular Assay Buffer
1.1a	Other means of identification:	
1.1b	Alternative product name(s)/ synonyms:	10X Cellular Assay Buffer, Cellular Assay Buffer, CellAB
1.1c	Product number/Catalog #(s):	6694, 6695
1.1d	Internal identification:	10X Cellular Assay Buffer, Cellular Assay Buffer, CellAB
1.2	Relevant identified uses of the substance or	For research use only. Not for use in diagnostic procedures.
1.0	mixture and uses advised against:	A 1 (6 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1.2a	Brief description of what the substance or mixture is	A buffered diluent for use in research laboratory techniques.
4.0	intended to do:	
1.3	Details of the supplier of the SDS:	Improvement Charactery, Tarabasala siana III C. (ICT)
1.3a	Name: Address:	ImmunoChemistry Technologies, LLC (ICT)
1.3b		9401 James Avenue South, Suite 155
1.3c 1.3d	City, State, Zip, Country Phone number:	Bloomington, MN 55431-2500 USA 1-800-829-3194 and 952-888-8788
1.3u 1.3e		952-888-8988
1.3e 1.3f	Fax number: Website:	www.immunochemistry.com
1.3g	Email:	help@immunochemistry.com
1.3h	Contact person at ICT:	Quality Documentation Department
1.4	Emergency telephone number:	ICT: 1-800-829-3194 (USA & Canada) or 952-888-8788 world wide;
1.4	Emergency telephone number.	ICT hours are 9 am-5 pm central time USA, Monday through Friday
		(excluding holidays). Chemtrec 24-hour access within USA and
		Canada: 1-800-424-9300 or +1 703-527-3887. Collect calls accepted.
		- Canadan - Coo III - Coo Co II - Coo Co II - Co II - Co
Sectio	n 2: Hazards identification	
2.1	Classification of the substance or mixture:	
2.1a	Product is a:	Mixture.
2.1b	Classification according to (EC) No. 1272/2008	Does not meet the criteria for classification.
	{CLP}:	
2.1c	The most important adverse physiochemical, human	Prolonged skin contact may cause redness and irritation. Refer to
	health, and environmental effects:	Sections 4, 9-12.
2.2	Label elements:	None.
2.2a	GHS label elements, including precautionary	
	statements:	
2.2b	Contains:	Contains ≤0.1% sodium azide.
2.2c	Labeling in accordance with (EC) No. 1272/2008:	None
2.2d	Hazard Pictograms (Hazard Symbols):	None.
2.2e	Signal word:	None.
2.2f	Hazard statements:	None.
2.2g	Precautionary statements:	None.
2.2h	Supplementary precaution statements:	None. No additional information available.
2.3 2.3a	Other hazards: Does the chemical meet the criteria for PBT or vPvB?	
2.3b	Other hazards which do not result in classification:	Not applicable. Contains sodium azide (NaN ₃ , CAS #26628-22-8; EC #247-852-1) at
2.30	Other hazards which do not result in classification.	≤0.1%, sodium chloride (NaCl, salt), and phosphates which are below
		the threshold for hazard classification, but may cause redness and
		irritation after prolonged exposure.
		Timation and proteinged expectation
Sectio	n 3: Composition/information on ingredients	
3.1	Substance:	Item is a mixture therefore Section 3.1 is not applicable; see Section
		3.2.
3.2	Mixture:	Item is a mixture.
	The chemical identity and concentration or	
	concentration ranges of all ingredients which are	
	hazardous and are present above their cut-off levels:	
	3.2a Chemical identity:	No ingredients identified for reporting in this section.
3.2u	Other information on the mixture:	None.
	n 4: First aid measures	
4.1	Description of first aid measures:	If concerned, get medical attention/advice and provide physician with
	I and the second se	SDS information. Wash contaminated clothing before re-use. Never
		give anything to an unconscious person.

10X Cellular Assay Buffer SDS; Doc# F17-6694-2-B; Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 2 of 6

	10X Cellular Assay Buffer SDS; DOC# F17-6694-2-B; E	ffective: 2017-05-19; Supersedes: F17-6694-2-A; Page 2 of 6
4.1a	Inhalation:	Remove to fresh air and keep at rest in a comfortable position for
		breathing. If not breathing, give artificial respiration. Rinse nose and
		mouth with water. Get medical attention if any discomfort continues.
4.1b	Skin contact:	Wash skin thoroughly with soap and water for several minutes;
		continue to rinse for at least 15 minutes. Remove any contaminated
		clothing and shoes and wash thoroughly before reuse. Get medical
		attention if any discomfort continues.
4.1c	Eye contact:	Promptly wash eyes with plenty of water while lifting the eyelids. Make
7.10	Lyc contact.	sure to remove any contact lenses from the eyes before rinsing.
		Continue to rinse for at least 15 minutes. Get medical attention if any
4.4-1	La martía m	discomfort continues.
4.1d	Ingestion:	NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK
		FLUIDS! Rinse mouth thoroughly. Do not induce vomiting without
		advice from poison control center or medical professional. Get medical
		attention if any discomfort continues.
4.2	Most important symptoms and effects, both acute	Contains sodium azide, sodium chloride, and phosphates which are
	and delayed:	below the threshold for hazard classification, but may cause redness
		and irritation after prolonged exposure.
4.2a	Inhalation:	May cause coughing or mild irritation.
4.2b	Skin contact:	Prolonged skin contact may cause redness and mild irritation.
4.2c	Eye contact:	May cause temporary eye irritation.
4.2d	Ingestion:	May cause discomfort if swallowed.
4.3	Indication of any immediate medical attention and	No specific first aid measures noted, but first aid may still be required
	special treatment needed:	in case of accidental exposure, inhalation, or ingestion of this product.
		If in doubt, get medical attention promptly!
4.3a	Notes to physician/first responder:	Treat symptomatically. Refer to Sections 5-8 for advice on personal
		protective equipment.
Section	n 5: Firefighting measures	
5.1	Extinguishing media:	This product is not flammable. Use fire-extinguishing media
		appropriate for the surrounding materials.
5.1a	Suitable extinguishing media:	Water spray, foam, dry powder, or carbon dioxide.
5.1b	Unsuitable extinguishing media:	None known.
5.2	Special hazards arising from the substance or	This product is not flammable. Product is not explosive. No dangerous
U		
1	mixture:	reactions known under normal conditions of use
5.22	mixture:	reactions known under normal conditions of use.
5.2a	Hazardous combustion products:	None under normal conditions.
5.2b	Hazardous combustion products: Unusual fire & explosion hazards:	None under normal conditions. No unusual fire or explosion hazards noted.
5.2b 5.2c	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials.
5.2b	Hazardous combustion products: Unusual fire & explosion hazards:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other
5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
5.2b 5.2c 5.3 5.3a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given.
5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
5.2b 5.2c 5.3 5.3a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards
5.2b 5.2c 5.3 5.3a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2b 5.2c 5.3 5.3a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards
5.2b 5.2c 5.3 5.3a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials.
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8).
5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes,
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition.
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned.
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8).
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a 6.1c	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses.
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses. Contain any spills with dikes or absorbent materials to prevent
5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a 6.1c	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: on 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses.

10X Cellular Assay Buffer SDS; Doc# F17-6694-2-B; Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 3 of 6 Section 13). Wash spill area thoroughly with plenty of soap and water. Avoid contact with skin or inhalation of spillage, dust, or vapour. 6.4 Refer to Sections 8 and 13 for additional information. Reference to other sections: Section 7: Handling and storage Precautions for safe handling: Do not handle until all safety precautions have been read and 7.1 understood. Avoid creation of aerosol/mist/dust. Avoid inhalation of vapors/mist/dust. Prevent contact with skin and eyes. Use appropriate personal protection equipment (PPE). Thoroughly wash hands and contaminated areas with water and soap before leaving the work site. Keep away from sources of ignition. 7.1a Avoid contact with halogenated hydrocarbons, strong acids, strong Prevent handling of incompatible substances or mixtures: oxidizers, and metals. 7.1b Advice on general occupational hygiene: Do not eat, drink, or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Good personal hygiene is necessary. Follow good laboratory hygiene and safety practices. 7.2 Conditions for safe storage, including any Store in cool place. Keep container tightly closed in a dry and wellincompatibilities: ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid spills and release into the environment; keep away from watercourses. 7.3 Specific end use(s): For research use only. Not for use in diagnostic procedures. Section 8: Exposure controls/personal protection **Control parameters:** 8.1 8.1a Occupational exposure limits, such as chemical Not available. identity, standard, TWA-8 hours (time weighted average), STEL-15 minutes (short term exposure limit), etc.: WEL = Workplace Exposure Limit. Sk = can be absorbed through skin. 8.1b Appropriate engineering controls: 8.1c Individual protection measures, such as personal Wear gloves. Wear protective goggles. protective equipment: 8.1d Safety symbols: 8.2 **Exposure controls:** 8.2a Process conditions: Provide eyewash station. 8.2b Engineering controls: Ensure that eyewash stations and safety showers are proximal to the workstation location. 8.2c Ventilation controls: Provide adequate ventilation. 8.2d Reference to other sections: Refer to Section 5 for additional information. Wear approved chemical safety goggles where eye exposure is 8.2e Eye/face protection: reasonably probable or face shield if risk of splashing. 8.2f Skin protection: Wear apron or protective clothing in case of contact. Use suitable protective gloves if risk of skin contact. 8.2g Hand protection: 8.2h Respiratory equipment: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Wear appropriate clothing to avoid skin contact. 8.2i Other protection: 8.2j DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift Hygiene measures: and before eating, smoking, and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink, or smoke. Wash promptly with soap and water if skin becomes contaminated 8.2k Thermal hazards: None known under normal conditions of use. Environmental exposure controls: 8.21 Not determined. Section 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties: 9.1a Appearance (physical state, color, etc.): Liquid; colorless. 9.1b No characteristic odor. Odor: Odor threshold: Not determined. 9.1c

10X Cellular Assay Buffer SDS; Doc# F17-6694-2-B; Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 4 of 6

		Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 4 of 6
9.1d	pH:	6.7-7.1
9.1e	Melting point/freezing point (°C):	Not determined.
9.1f	Initial boiling point and boiling range:	<100°C @ 760 mm Hg.
9.1g	Flash point (°C):	Not applicable.
9.1h	Evaporation rate:	Not determined.
9.1i	Flammability (solid, gas):	Not applicable.
9.1j	Upper/lower flammability or explosive limits:	Not applicable.
9.1k	Vapor pressure:	Not determined.
9.11	Vapor density (Air =1):	Not determined.
9.1m	Relative density:	Not determined.
9.1n	Solubility(ies):	Soluble in water.
9.10	Partition coefficient (N-octanol/water):	Not determined.
9.1p	Auto-ignition temperature (°C):	Not determined.
9.1q	Decomposition temperature (°C):	Not determined.
9.1r	Viscosity:	Not determined.
9.1s	Explosive properties:	Not determined.
		Not determined. Not determined.
9.1t	Oxidizing properties:	
9.2	Other information:	None.
9.2a	Other physical or chemical parameters:	None.
Section	n 10: Stability and reactivity	
10.1	Reactivity:	No data available.
10.2	Chemical stability:	Stable under normal temperature conditions.
10.3	Possibility of hazardous reactions:	Hazardous polymerization: will not polymerize.
10.3	Conditions to avoid:	To avoid product degradation, avoid exposure to high temperatures or
10.4	Conditions to avoid.	
40 F	Incompatible metarials:	direct sunlight or light.
10.5	Incompatible materials:	Avoid contact with halogenated hydrocarbons, strong acids, strong
		oxidizers, and metals.
10.6	Hazardous decomposition products:	None under normal conditions.
Section	n 11: Toxicological information	
11.1	Information on toxicological effects:	
11.1a	Name:	10X Cellular Assay Buffer
11.1b	Acute toxicity:	Not determined.
11.1c	Skin corrosion/irritation:	Not determined.
11.1d		
	Serious eye damage/irritation:	Not determined.
11.1e	Respiratory or skin sensitization:	Not determined.
11.1f	Germ cell mutagenicity:	Not determined.
11.1g	Carcinogenicity:	Not determined.
11.1h	Reproductive toxicity:	Not determined.
11.1i	STOT-single exposure:	Not determined.
11.1j	STOT-repeated exposure:	Not determined.
11.1k	Aspiration hazard:	Not determined.
11.11	Information on the likely routes of exposure	May enter by skin and/or eye contact; inhalation of vapors/mist/dust.
11.11		iviay effici by skill and/of eye contact, illitalation of vapors/filist/dust.
44.4	(inhalation, ingestion, skin and eye contact):	AA 11 C 4 C 11 1
11.1m	Ingestion:	May cause discomfort if swallowed.
11.1n	Inhalation:	In high concentrations, vapors may irritate throat and respiratory
		system and cause coughing.
11.1o	Skin contact:	Liquid may irritate skin and cause redness.
11.1p	Eye contact:	Spray and vapor in the eyes may cause irritation and smarting.
11.1q	Symptoms related to the physical, chemical and	No specific symptoms noted.
• • • • • •	toxicological characteristics:	p
11.1r	Delayed and immediate effects as well as chronic	Not determined.
11.11		Not determined.
44.4	effects from short and long term exposure:	Not determined
11.1s	Numerical measures of toxicity (such as acute	Not determined.
	toxicity estimates):	
11.1t	Interactive effects:	Not determined.
11.1u	Absence of specific data:	Not applicable.
11.1v	Mixtures:	Item is a mixture.
11.1w	Mixture vs. substance information:	See Section 3 for any substances in the mixture.
11.1w	Classification by National Toxicity Program (NTP):	Not classified.
11.1y	Classification by International Agency for Research	Not classified.
	on Cancer (IARC):	N
11.1z	Classification by OSHA 13:	Not classified.
11.1ab	Other information:	None.
Section	n 12: Ecological information	
12.1	Toxicity:	
12.1a	Name:	10X Cellular Assay Buffer.
12.1b	Ecotoxicity (aquatic and terrestrial, where available):	No data available.
14.10	Locionicity (aquatic and terrestrial, where available).	110 data available.

10X Cellular Assay Buffer SDS; Doc# F17-6694-2-B; Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 5 of 6

40.0		Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 5 of 6
12.2	Persistence and degradability:	There are no data on the degradability of this product.
12.3	Bioaccumulative potential:	No data available on bioaccumulation.
12.4	Mobility in soil:	The product is soluble in water.
12.5	Results of PBT and vPvB assessment:	Not determined.
12.6	Other adverse effects:	The product contains a substance (sodium azide ≤0.1%) that may
		cause long term adverse effects in the aquatic environment. However,
		at the concentrations present, this product does not need to be
		classified as hazardous for the environment, and the effects are not
		expected to be significant.
	1	, · · · · · · · · · · · · · · · · · · ·
Section	n 13: Disposal considerations	
13.1	Waste treatment methods:	When handling waste, conisderation should be made to the safety
.0.1	Tradio ir dainoni motilodo.	precautions applying to handling of the product.
13.1a	Description of waste residues and information on	Dispose of waste and residues in accordance with local authority
15.1a	their safe handling and methods of disposal,	requirements. For the safety of persons conducting disposal, recycling
	including the disposal of any contaminated	or reclamation activities, please refer to the information in Section 8
	packaging:	(exposure controls and personal protection) of the SDS.
0	. 44	
	n 14: Transport information	1
14.1	UN number:	Not applicable.
14.2	UN proper shipping name:	Not applicable.
14.3	Transport hazard class(es):	Not applicable.
14.4	Packing group:	Not applicable.
14.5	Environmental hazards:	The product contains a substance (sodium azide ≤0.1%) that may
		cause long term adverse effects in the aquatic environment. However,
		at the concentrations present, this product does not need to be
		classified as hazardous for the environment, and the effects are not
		expected to be significant.
14.5a	Is it environmentally dangerous according to UN	No.
1 4 .5a	Model Regulations (IMDG Code, ADR, RID, and	NO.
44.55	ADN)?:	N.
14.5b	Is it a marine pollutant according to the IMDG	No.
	code?:	
14.6	Special precautions for user:	None known.
14.7	Transport in bulk according to Annex II of	Not applicable.
	MARPOL and the IBC code:	
14.7a	Other information:	The product is not considered a dangerous good for transport.
14.7b	Classification for other modes of transport:	Contact supplier.
Section	n 15: Regulatory information	
15.1	Safety, health and environmental	
13.1	regulations/legislation specific for the substance	•
45.4		
	or mixture:	
15.1a	Regional safety, health and environmental	
	Regional safety, health and environmental regulations specific for the product in question:	
15.1b	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313):	Sodium azide (CAS # 26628-22-8) is listed under 302, 304, 313.
15.1b 15.1c	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know:	Sodium azide (CAS # 26628-22-8) is listed.
15.1b 15.1c 15.1d	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed.
15.1b 15.1c	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know:	Sodium azide (CAS # 26628-22-8) is listed.
15.1b 15.1c 15.1d 15.1e	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed.
15.1b 15.1c 15.1d 15.1e 15.1f	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation,
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1k 15.1l	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1s 15.1k	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1s	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1s 15.1k 15.1l	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1s 15.1k 15.1l	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1k 15.1l	Regional safety, health and environmental regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information:	Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Sodium azide (CAS # 26628-22-8) is listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.

10X Cellular Assay Buffer SDS; Doc# F17-6694-2-B; Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 6 of 6

10.15		Effective: 2017-05-19; Supersedes: F17-6694-2-A; Page 6 of 6
16.1a	Date of revision:	2017-05-19
16.1b	SDS number and revision:	F17-6694-2-B
16.1c 16.1d 16.1e	Supersedes SDS number and revision: Changes made to the previous version of the SDS: Key/legend to abbreviations and acronyms used in the SDS:	Reviewed and updated document control numbers. ACGIH American Conference of Governmental Industrial Hygienists. ADN European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway. ADR The European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE Acute Toxicity Estimate. BCF Bio Concentration Factor. CAS Chemical Abstracts Service. CLP Classification, Labelling and Packaging. CMR Carcinogen, Mutagen or Reproductive toxicant. COD Chemical Oxygen Demand. EC European Commission. EC50 Half maximal effective concentration. EH40 Resource containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations. EINECS European Inventory of Existing Commercial chemical Substances. ELINCS European List of Notified Chemical Substances. EU European Union. GHS Globally Harmonized System of Classification and Labelling of Chemicals. H Statement GHS Hazard statement. IATA International Air Transport Association. IBC Intermediate Bulk Container. IG50 Half maximal inhibitory concentration. IBC Intermediate Bulk Container. IG50 Median lethal concentration. LD50 Median lethal dose. LogPow logarithm of the octanol/water partition coefficient. MARPOL 73/78 International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. OEL Occupational Exposure Limit. OSHA Occupational Safety and Health Administration (USA). PBT Persistent, Bioaccumulative, and Toxic. PEL Permissible Exposure Limit. RID The Regulations concerning the International Carriage of Dangerous Goods by Rail. SADT Self-Accelerating Decomposition Temperature. SARA Superfund Amendments and Reauthorization Act. SCBA Self-Contained Breathing Apparatus. SDS Safety Data Sheet. STOT-SE Specific Target Organ Toxicity - Repeated Exposure. UN United Nations.
		USA United States of America.
		vPvB very Persistent very bioaccumulative.
16.1f	Full text of hazard statements and/or precautionary	All statements were written out in full.
	statements not written out in full elsewhere:	
DISCLA		fic material designated and may not be valid for such material used

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

END OF SDS



SAFETY DATA SHEET (SDS) according to Regulation (EC) No. 830/2015 amending 1907/2006

1.1	on 1: Identification of the substance/mixture and of the Product identifier:	
		Hoechst 33342
1.1a	Other means of identification:	
1.1b	Alternative product name(s)/ synonyms:	Hoechst stain, HS
1.1c	Product number/Catalog #(s):	556, 639
1.1d	Internal identification:	Hoechst stain; HS
1.2	Relevant identified uses of the substance or	For research use only. Not for use in diagnostic procedures.
	mixture and uses advised against:	
1.2a	Brief description of what the substance or mixture is	Cell permeant blue fluorescent stain typically used to visualize the
	intended to do:	nuclei of cells.
1.3	Details of the supplier of the SDS:	
1.3a	Name:	ImmunoChemistry Technologies, LLC (ICT)
1.3b	Address:	9401 James Avenue South, Suite 155
1.3c	City, State, Zip, Country	Bloomington, MN 55431-2500 USA
1.3d	Phone number:	1-800-829-3194 and 952-888-8788
1.3e	Fax number:	952-888-8988
1.3f	Website:	www.immunochemistry.com
1.3g	Email:	help@immunochemistry.com
1.3h	Contact person at ICT:	Quality Documentation Department
1.4	Emergency telephone number:	ICT: 1-800-829-3194 (USA & Canada) or 952-888-8788 world wide;
		ICT hours are 9 am-5 pm central time USA, Monday through Friday
		(excluding holidays). Chemtrec 24-hour access within USA and
		Canada: 1-800-424-9300 or +1 703-527-3887. Collect calls accepted.
	n 2: Hazards identification	
2.1	Classification of the substance or mixture:	
2.1a	Product is a:	Mixture.
2.1b	Classification according to (EC) No. 1272/2008	Does not meet the criteria for classification.
	{CLP}:	
2.1c	The most important adverse physiochemical, human	Refer to Sections 9-12.
	health, and environmental effects:	
2.2	Label elements:	None.
2.2a	GHS label elements, including precautionary	
	statements:	
2.2b	Contains:	
2.2c	Labeling in accordance with (EC) No. 1272/2008:	
2.2d	Hazard Pictograms (Hazard Symbols):	None.
2.2e	Signal word:	None.
2.2f	Hazard statements:	None.
2.2g	Precautionary statements:	None.
2.2h	Supplementary precaution statements:	None.
2.3	Other hazards:	No additional information available.
2.3a	Does the chemical meet the criteria for PBT or vPvB?	Not applicable.
2.3b	Other hazards which do not result in classification:	Hoechst contains a low concentration of Bis benzimide H 33342
		trihydrochloride (CAS 23491-52-3) which is below the threshold for
		reporting. Hoechst is a suspected mutagen at high concentrations.
		Prolonged skin contact may cause redness and irritation. Because of
		the small quantity of product, the health hazard is small.
	on 3: Composition/information on ingredients	
3.1	Substance:	Item is a mixture therefore Section 3.1 is not applicable; see Section
		3.2.
3.2	Mixture:	Item is a mixture.
	The chemical identity and concentration or	
	concentration ranges of all ingredients which are	
	hazardous and are present above their cut-off levels:	
	3.2a Chemical identity:	No ingredients identified for reporting in this section.
	on 4: First aid measures	
Sectio 4.1	Description of first aid measures:	If concerned, get medical attention/advice and provide physician with
		If concerned, get medical attention/advice and provide physician with SDS information. Wash contaminated clothing before re-use. Never give anything by mouth to an unconscious person.

Hoechst 33342 SDS; Doc# F17-556-2-D; Effective: 05/12/2017; Supersedes: F17-556-2-C; Page 2 of 6

		ve: 05/12/2017; Supersedes: F17-556-2-C; Page 2 of 6
4.1a	Inhalation:	Remove to fresh air and keep at rest in a comfortable position for
		breathing. If not breathing, give artificial respiration. Rinse nose and
		mouth with water. Get medical attention if any discomfort continues.
4.1b	Skin contact:	Wash skin thoroughly with soap and water for several minutes;
		continue to rinse for at least 15 minutes. Remove any contaminated
		clothing and shoes and wash thoroughly before reuse. Get medical
		attention if any discomfort continues.
4.1c	Eye contact:	Promptly wash eyes with plenty of water while lifting the eyelids. Make
4.10	Lye contact.	sure to remove any contact lenses from the eyes before rinsing.
		Continue to rinse for at least 15 minutes. Get medical attention if any
		discomfort continues.
4.1d	Ingestion:	NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK
		FLUIDS! Rinse mouth thoroughly. Do not induce vomiting without
		advice from poison control center or medical professional. Get medical
		attention if any discomfort continues.
4.2	Most important symptoms and effects, both acute	Hoechst is a suspected mutagen at high concentrations. Prolonged
	and delayed:	skin contact may cause redness and irritation. Because of the small
		quantity of product, the health hazard is small.
4.2a	Inhalation:	May cause coughing or mild irritation.
4.2b	Skin contact:	
		Prolonged skin contact may cause redness and mild irritation.
4.2c	Eye contact:	May cause temporary eye irritation.
4.2d	Ingestion:	May cause discomfort if swallowed.
4.3	Indication of any immediate medical attention and	No specific first aid measures noted, but first aid may still be required
	special treatment needed:	in case of accidental exposure, inhalation, or ingestion of this product.
		If in doubt, get medical attention promptly!
4.3a	Notes to physician/first responder:	Treat symptomatically. Refer to Sections 5-8 for advice on personal
		protective equipment.
		protocuro oquipmonu
Section	n 5: Firefighting measures	
5.1	Extinguishing media:	This product is not flammable. Use fire-extinguishing media
3.1	Extinguishing media.	
- 4		appropriate for the surrounding materials.
5.1a	Suitable extinguishing media:	Water spray, foam, dry powder, or carbon dioxide.
5.1b	Unsuitable extinguishing media:	None known.
5.2	Special hazards arising from the substance or	This product is not flammable. Product is not explosive. No dangerous
J.2		
	mixture:	reactions known under normal conditions of use.
5.2a	mixture: Hazardous combustion products:	reactions known under normal conditions of use. None under normal conditions.
5.2a 5.2b	Hazardous combustion products: Unusual fire & explosion hazards:	None under normal conditions. No unusual fire or explosion hazards noted.
5.2a 5.2b 5.2c	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials.
5.2a 5.2b	Hazardous combustion products: Unusual fire & explosion hazards:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other
5.2a 5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
5.2a 5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given.
5.2a 5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing
5.2a 5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards
5.2a 5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2a 5.2b 5.2c 5.3	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials.
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8).
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes,
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition.
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition.
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any
5.2a 5.2b 5.2c 5.3 5.3a 5.3b	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned.
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Sectio 6.1	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Section 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Sectio 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8).
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Sectio 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8).
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Sectio 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses. Contain any spills with dikes or absorbent materials to prevent
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Sectio 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions:	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses. Contain any spills with dikes or absorbent materials to prevent migration and entry into sewers or water sources. Place in a suitable
5.2a 5.2b 5.2c 5.3 5.3a 5.3b Sectio 6.1 6.1a	Hazardous combustion products: Unusual fire & explosion hazards: Protective measures in fire: Advice for firefighters: Special firefighting procedures: Special protective equipment and precautions for firefighters: n 6: Accidental release measures Personal precautions, protective equipment, and emergency procedures: General release measures: Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures: Advice for emergency responders; personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and	None under normal conditions. No unusual fire or explosion hazards noted. Use protective equipment appropriate for surrounding materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No specific firefighting procedure given. Wear full protective clothing, including self-contained breathing apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use protective equipment appropriate for surrounding materials. No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Remove all sources of ignition. Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if concerned. Wear suitable protective clothing, gloves and eye or face protection to avoid contact; use an approved supplied-air respirator, in case of emergency (also refer to Section 8). Do not allow to enter drains, sewers, or watercourses. Contain any spills with dikes or absorbent materials to prevent

Hoechst 33342 SDS; Doc# F17-556-2-D; Effective: 05/12/2017; Supersedes: F17-556-2-C; Page 3 of 6 Section 13). Wash spill area thoroughly with plenty of soap and water. Avoid contact with skin or inhalation of spillage, dust, or vapor. Reference to other sections: Refer to Sections 8 and 13 for additional information. 6.4 Section 7: Handling and storage Do not handle until all safety precautions have been read and 7.1 Precautions for safe handling: understood. Avoid creation of aerosol/mist/dust. Avoid inhalation of vapors/mist/dust. Prevent contact with skin and eyes. Use appropriate personal protection equipment (PPE). Thoroughly wash hands and contaminated areas with water and soap before leaving the work site. Keep away from sources of ignition. 7.1a Prevent handling of incompatible substances or Avoid contact with strong acids and strong oxidizers. mixtures: 7.1b Do not eat, drink, or smoke in work areas. Wash hands after use. Advice on general occupational hygiene: Remove contaminated clothing and protective equipment before entering eating areas. Good personal hygiene is necessary. Follow good laboratory hygiene and safety practices. 7.2 Conditions for safe storage, including any Refer to product label. Store in cool place. Keep container tightly incompatibilities: closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid spills and release into the environment; keep away from watercourses. 7.3 Specific end use(s): For research use only. Not for use in diagnostic procedures. Section 8: Exposure controls/personal protection Control parameters: 8.1 8.1a Occupational exposure limits, such as chemical Not available. identity, standard, TWA-8 hours (time weighted average), STEL-15 minutes (short term exposure limit), etc.: WEL = Workplace Exposure Limit. Sk = can be absorbed through skin. 8.1b Appropriate engineering controls: 8.1c Individual protection measures, such as personal Wear gloves, protective goggles, and lab coat. protective equipment: 8.1d Safety symbols: 8.2 **Exposure controls:** 8.2a Process conditions: Provide eyewash station. 8.2b Engineering controls: Ensure that eyewash stations and safety showers are proximal to the workstation location. Ventilation controls: Provide adequate ventilation. 8.2c 8.2d Reference to other sections: Refer to Section 5 for additional information. Wear approved chemical safety goggles where eye exposure is 8.2e Eye/face protection: reasonably probable or face shield if risk of splashing. 8.2f Skin protection: Wear apron or protective clothing in case of contact. Use suitable protective gloves if risk of skin contact. 8.2g Hand protection: 8.2h Respiratory equipment: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 8.2i Wear appropriate clothing to avoid skin contact. Other protection: 8.2j DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift Hygiene measures: and before eating, smoking, and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink, or smoke. Wash promptly with soap and water if skin becomes contaminated 8.2k None known under normal conditions of use. Thermal hazards: 8.21 Environmental exposure controls: Not determined. Section 9: Physical and chemical properties 9.1 Information on basic physical and chemical

Liquid; clear light yellow.

No characteristic odor.

Not determined.

properties:

Odor threshold:

Odor:

Appearance (physical state, color, etc.):

9.1a

9.1b

9.1c

Hoechst 33342 SDS; Doc# F17-556-2-D; Effective: 05/12/2017; Supersedes: F17-556-2-C; Page 4 of 6

		10: 05/12/2017; Supersedes: F17-556-2-C; Page 4 01 6
9.1d	pH:	3.0-5.0
9.1e	Melting point/freezing point (°C):	Not determined.
9.1f	Initial boiling point and boiling range:	<100°C @ 760 mm Hg.
9.1g	Flash point (°C):	Not applicable.
9.1h	Evaporation rate:	Not determined.
9.1i	Flammability (solid, gas):	Not applicable.
9.1j	Upper/lower flammability or explosive limits:	Not applicable.
9.1k	Vapor pressure:	Not determined.
9.11	Vapor density (Air =1):	Not determined.
	Relative density:	
9.1m		Not determined.
9.1n	Solubility(ies):	Soluble in water.
9.10	Partition coefficient (N-octanol/water):	Not determined.
9.1p	Auto-ignition temperature (°C):	Not determined.
9.1q	Decomposition temperature (°C):	Not determined.
9.1r	Viscosity:	Not determined.
9.1s	Explosive properties:	Not determined.
9.1t	Oxidizing properties:	Not determined.
9.2	Other information:	None.
9.2a	Other physical or chemical parameters:	None.
3.Za	Other physical of chemical parameters.	None.
	40.00 1 1111	
	10: Stability and reactivity	
10.1	Reactivity:	No data available.
10.2	Chemical stability:	Stable under normal temperature conditions.
10.3	Possibility of hazardous reactions:	Hazardous polymerization: will not polymerize.
	Conditions to avoid:	
10.4	Conditions to avoid:	To avoid product degradation, avoid exposure to high temperatures or
		direct sunlight or light.
10.5	Incompatible materials:	Strong oxidizing substances.
10.6	Hazardous decomposition products:	None under normal conditions.
.0.0	Tidada do do composition productor	Trene under normal conditions.
0	AA. Taulada dada listama (las	
	11: Toxicological information	
11.1	Information on toxicological effects:	
11.1a	Name:	Hoechst 33342
11.1b	Acute toxicity:	Not determined.
11.1c	Skin corrosion/irritation:	Not determined.
11.1d	Serious eye damage/irritation:	Not determined.
11.1e	Respiratory or skin sensitization:	Not determined.
11.1f	Germ cell mutagenicity:	Toxicological studies are not yet available. In vitro DNA repair and
		inhibition tests suggest mutagenic effects in mouse fibroblasts and
		hamster lung cells. Knowledge about health hazard is incomplete.
11.1g	Carcinogenicity:	Not determined.
11.1h	Reproductive toxicity:	Not determined.
11.1i	STOT-single exposure:	Not determined.
11.1j	STOT-repeated exposure:	Not determined.
_		
11.1k	Aspiration hazard:	Not determined.
11.11	Information on the likely routes of exposure	
		May enter by skin and/or eye contact; inhalation of vapors/mist/dust.
		May enter by skin and/or eye contact; inhalation of vapors/mist/dust.
11 1m	(inhalation, ingestion, skin and eye contact):	
11.1m	(inhalation, ingestion, skin and eye contact): Ingestion:	May cause discomfort if swallowed.
11.1m 11.1n	(inhalation, ingestion, skin and eye contact):	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory
11.1n	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing.
	(inhalation, ingestion, skin and eye contact): Ingestion:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin.
11.1n 11.1o	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin.
11.1n 11.1o 11.1p	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting.
11.1n 11.1o	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin.
11.1n 11.10 11.1p 11.1q	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted.
11.1n 11.1o 11.1p	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting.
11.1n 11.10 11.1p 11.1q	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted.
11.1n 11.10 11.1p 11.1q	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined.
11.1n 11.10 11.1p 11.1q	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates):	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s 11.1t 11.1u	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined. Not applicable.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s 11.1t 11.1u 11.1v	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined. Not applicable. Item is a mixture.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP):	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified.
11.1n 11.1o 11.1p 11.1q 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture.
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC):	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified.
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC):	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified.
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y 11.1z	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC): Classification by OSHA 13:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified. Not classified.
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC):	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified. Not classified. Not classified. Not classified. Hoechst is a suspected mutagen at high concentrations. Prolonged skin
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y 11.1z	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC): Classification by OSHA 13:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified. Not classified. Not classified. Not classified. Not classified. Not classified. Prolonged skin contact may cause redness and irritation. Because of the small quantity
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y 11.1z	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC): Classification by OSHA 13:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified. Not classified. Not classified. Not classified. Hoechst is a suspected mutagen at high concentrations. Prolonged skin
11.1n 11.1o 11.1p 11.1r 11.1s 11.1t 11.1u 11.1v 11.1w 11.1x 11.1y 11.1z	(inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data: Mixtures: Mixture vs. substance information: Classification by National Toxicity Program (NTP): Classification by International Agency for Research on Cancer (IARC): Classification by OSHA 13:	May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not applicable. Item is a mixture. See Section 3 for any substances in the mixture. Not classified. Not classified. Not classified. Not classified. Not classified. Not classified. Prolonged skin contact may cause redness and irritation. Because of the small quantity

Hoechst 33342 SDS; Doc# F17-556-2-D; Effective: 05/12/2017; Supersedes: F17-556-2-C; Page 5 of 6

Section	n 12: Ecological information	
12.1	Toxicity:	
12.1a	Name:	Hoechst 33342.
12.1b	Ecotoxicity (aguatic and terrestrial, where available):	Not determined.
12.2	Persistence and degradability:	There are no data on the degradability of this product.
12.3	Bioaccumulative potential:	No data available on bioaccumulation.
12.4	Mobility in soil:	The product is soluble in water.
12.5	Results of PBT and vPvB assessment:	Not determined.
12.6	Other adverse effects:	No data available.
	40.51	
	13: Disposal considerations	1 AA
13.1	Waste treatment methods:	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
13.1a	Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:	Dispose of waste and residues in accordance with local authority requirements. For the safety of persons conducting disposal, recycling or reclamation activities, please refer to the information in Section 8 (exposure controls and personal protection) of the SDS.
Section	14: Transport information	
14.1	n 14: Transport information UN number:	Not applicable.
14.1	UN proper shipping name:	Not applicable.
14.3	Transport hazard class(es):	Not applicable.
14.4	Packing group:	Not applicable.
14.5	Environmental hazards:	
14.5a	Is it environmentally dangerous according to UN Model Regulations (IMDG Code, ADR, RID, and ADN)?:	The product is not covered by these regulations.
14.5b	Is it a marine pollutant according to the IMDG code?:	No.
14.6	Special precautions for user:	None known.
14.7	Transport in bulk according to Annex II of MARPOL and the IBC code:	Not applicable.
14.7a	Other information:	The product is not considered a dangerous good for transport.
14.7b	Classification for other modes of transport:	Contact supplier.
	15: Regulatory information	
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture:	
15.1a		
	Regional safety, health and environmental regulations specific for the product in question:	
	regulations specific for the product in question:	. Not listed.
15.1b 15.1c		Not listed. Not listed.
15.1b	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know:	
15.1b 15.1c 15.1d 15.1e	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know:	Not listed. Not listed. Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components:	Not listed. Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}:	Not listed. Not listed. Not listed. Not listed
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization:	Not listed. Not listed. Not listed. Not listed Not listed Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern:	Not listed. Not listed. Not listed. Not listed. Not listed. Not listed. Not listed. Not listed.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1s 15.1k	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references:	Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1k 15.11	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references:	Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1j	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references:	Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1s 15.1s 15.1s 15.1s 15.1s	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information:	Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1j 15.1k 15.1l	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information: 16: Other information:	Not listed. Not listed. Not listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1i 15.1i 15.1s 15.1k 15.1l	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information: 16: Other information: Date of revision:	Not listed. Not listed. Not listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required. None.
15.1b 15.1c 15.1d 15.1e 15.1f 15.1g 15.1h 15.1i 15.1j 15.1k 15.1l	regulations specific for the product in question: USA SARA Components (such as 302/311/313): USA Massachusetts Right to Know: USA Pennsylvania Right to Know: USA New Jersey Right to Know: USA California Prop. 65 Components: EU Regulation 1907/2006 {REACH}: Annex XIV substances subject to authorization: Substances of very high concern: Approved code of practice: Guidance notes: EU legislation references: Chemical safety assessment: Other regulatory information: 16: Other information:	Not listed. Not listed. Not listed. Not listed. Not listed. Not listed. Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Not required.

Hoechst 33342 SDS; Doc# F17-556-2-D; Effective: 05/12/2017; Supersedes: F17-556-2-C; Page 6 of 6 Reviewed and updated document control numbers. 16.1d Changes made to the previous version of the SDS: 16.1e Key/legend to abbreviations and acronyms used in ACGIH American Conference of Governmental Industrial Hygienists. ADN European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway. ADR The European Agreement concerning the International Carriage of Dangerous Goods by Road. ATE Acute Toxicity Estimate. BCF Bio Concentration Factor. CAS Chemical Abstracts Service. CLP Classification, Labelling and Packaging. CMR Carcinogen, Mutagen or Reproductive toxicant. COD Chemical Oxygen Demand. EC European Commission. EC50 Half maximal effective concentration. EH40 Resource containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations. EINECS European Inventory of Existing Commercial chemical Substances. ELINCS European List of Notified Chemical Substances. EU European Union. GHS Globally Harmonized System of Classification and Labelling of Chemicals. H Statement GHS Hazard statement. IATA International Air Transport Association. IBC Intermediate Bulk Container. IC50 Half maximal inhibitory concentration. IMDG International Maritime Dangerous Goods. LC50 Median lethal concentration. LD50 Median lethal dose. LogPow logarithm of the octanol/water partition coefficient. MARPOL 73/78 International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. OEL Occupational Exposure Limit. OSHA Occupational Safety and Health Administration (USA). PBT Persistent, Bioaccumulative, and Toxic. PEL Permissible Exposure Limit. RID The Regulations concerning the International Carriage of Dangerous Goods by Rail. SADT Self-Accelerating Decomposition Temperature. SARA Superfund Amendments and Reauthorization Act. SCBA Self-Contained Breathing Apparatus. SDS Safety Data Sheet. STOT Specific Target Organ Toxicity. STOT-RE Specific Target Organ Toxicity - Repeated Exposure. STOT-SE Specific Target Organ Toxicity - Single Exposure.

16.1f Full text of hazard statements and/or precautionary statements not written out in full elsewhere:

All statements were written out in full.

vPvB very Persistent very bioaccumulative.

USA United States of America.

DISCLAIMER:

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

UN United Nations.

END OF SDS