Safety Data Sheet

Kit summary

Following components used as mixtures in the kit are defined as hazardous chemical according to the Regulation (EC) N° 1272/2008.

Component	EC-No	CAS-No	% weight	Classification (pure ingredient)	Hazard Statements
Sodium Azide NaN_3	247-852-1	26628-22-8	0.09%	GHS06 GHS09	H300 Cat 2 H310 Cat 1 H410 Cat 1 EUH032
Proclin 300	-	55965-84-9	0.1-1%	GHS06 GHS05 GHS09	H302 Cat 4 H314 Cat 1B H317 Cat 1 H318 Cat 1 H400 Cat 1 H410 Cat 1
Sulfuric Acid	231-639-5	7664-93-9	4.2%	GHS05	H314 Cat 1A
Sodium tetraborate decahydrate	215-540-4	1303-96-4	< 1.9%	GHS08	H360FD Cat 1B
H_2O_2	231-765-0	7722-84-1	< 0.01%	GHS05	H318 Cat 1 H412 Cat 3
TMB Substrate	NC	NC	< 5%	GHS07 GHS08	H315 H319 H335 H360

Other chemicals contained within these products do not meet definition of a hazardous chemical according to the Regulation (EC) N° 1272/2008.

Section 1 – Identification

Product Identification: **ELISA kits High Sensitivity using Amplification Steps**
Product Code: **Cat- n° 850 810.xxx/ 850 870.xxx/ 850 880.xxx/ 850 890.xxx/ 850.900.xxx**
Product Application: **For Research Use Only**

Manufacturer:

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Section 2 – Hazard Identification

2.1 Classification

This product is not classified according to the CLP regulation

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 : Void
Hazard pictograms : Void
Signal word : Void
Hazard statements : Void

Section 3 –Composition / Information on Ingredients

3.2 Mixtures

Component	Contains	Identification	Classification (pure ingredient)	Hazard Statements	%
Coated Microwell strips	-	-	NA	-	-
Standards	-	-	NA	-	-
Biotinylated Antibody	ProClin 300	CAS : 55965-84-9 EC : - REACH : -	GHS06 GSH05 GHS09	H302 Cat 4 H314 Cat 1B H317 Cat 1 H318 Cat 1 H400 Cat 1 H410 Cat 1	0.1%
Streptavidin- HRP	2-Methyl-2H isothiazol-3-one	CAS : 2682-20-4 EC : 220-239-6 REACH : -	GHS07	H317 Cat 1	≤ 0.06%
Standard diluent Buffer	ProClin 300	CAS : 55965-84-9 EC : - REACH : -	GHS06 GSH05 GHS09	H302 Cat 4 H314 Cat 1B H317 Cat 1 H318 Cat 1 H400 Cat 1 H410 Cat 1	1%
Standard diluent Serum	NaN_3	CAS : 26628-22-8 EC : 247-852-1 REACH : 01-2119457019-37-0000	GHS06 GHS09	H300 Cat 2 H310 Cat 1 H410 Cat 1 EUH032	0.09%
Biotinylated Antibody Diluent	NaN_3	CAS : 26628-22-8 EC : 247-852-1 REACH : 01-2119457019-37-0000	GHS06 GHS09	H300 Cat 2 H310 Cat 1 H410 Cat 1 EUH032	0.09%
HRP Diluent	ProClin 300	CAS : 55965-84-9 EC : - REACH : -	GHS06 GSH05 GHS09	H302 Cat 4 H314 Cat 1B H317 Cat 1 H318 Cat 1 H400 Cat 1 H410 Cat 1	0.1%
Wash Buffer	-	-	NA	-	-
Amplifier	Sodium tetraborate decahydrate	CAS : 1303-96-4 EC : 215-540-4 REACH : 01-2119490790-32-XXXX	GHS08	H360FD Cat 1B	< 1.9%
Amplifier Diluent	H_2O_2	CAS : 7722-84-1 EC : 231-765-0 REACH : -	GHS05	H318 Cat 1 H412 Cat 3	< 0.01%
TMB Substrate	Not communicated	CAS : NC EC : NC REACH : -	GHS07 GHS08	H315 H319 H335 H360	≤ 5%

Stop Reagent	Sulfuric Acid	CAS : 7664-93-9 EC : 231-639-5 REACH : 01-2119458838-20-0000	GHS05	H314 Cat 1A	4.2%

For the full text of the H-Statements mentioned in this Section, see Section 16.

Additional information
The data and advice relate to the concentrations not of the lyophilized powder, but of the prepared solution.

Section 4 - First Aid Measures

General information: Consult a doctor if necessary and provide this SDS.

After inhalation: Supply fresh air; consult doctor or poison center in case of complaints.
After skin contact: Rinse with plenty of water and soap.
After eye contact: Rinse opened eye for several minutes under running water.
After ingestion: If symptoms persist consult doctor. Do NOT induce vomiting.

Most important symptoms or effects: No available data.

Section 5 – Fire Fighting Measures

Suitable extinguishing agents: CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Specific hazards due to combustion products: Do not breathe fumes. Smoke from fires is toxic. Take precautions to protect personnel from exposure. Decomposition products may include carbon oxides.
Protective equipment for firefighters: Wear chemical protection suit and positive-pressure breathing apparatus. Wear protective clothing.

Section 6 – Accidental Release Measures

Person-related safety precautions: Wear appropriate PPE.
Measures for environmental protections: Do not allow to enter sewers / surface or ground water.
Measures for cleaning / collecting: Dilute with plenty of water and absorb with wipe dry.

Section 7 – Handling and storage

7.1 Handling
Information for safe handling: Avoid breathing dust, vapour, mist or gas. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Use with adequate ventilation.
Follow standard laboratories practices.

Information about fire - and explosion protection
The product listed in this SDS contains sodium azide, a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, concentration build-ups of sodium azide may react with lead and copper plumbing to form explosion.

7.2 Storage
Requirement to be met by storerooms and receptacles: Store in a cool, dry, well ventilated area away from incompatible substances. Keep away from metal ions.
Storage class: Store product and all components at 2-8°C.

Section 8 – Exposure Controls / Personal Protection

8.1 Control of exposition
The product does not contain any relevant quantities of material with critical values that have to be monitored at the workplace.

8.2 Personal protective equipment
General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.
Respiratory protection: Not required if ventilation is adequate.
Protection of hands: Protective gloves.
Eye Protection: Goggles recommended during refilling.

8.3 Environmental exposure controls
Not available.

Section 9 - Physical and Chemical Properties

Form: Liquid
Colour:

Components	Ingredients	Colour
Biotinylated Antibody	ProClin 300 (0.1%)	Colourless
Standard diluent Buffer	ProClin 300 (1%)	Red
Standard diluent Serum	NaN_3 (0.09%)	Opaque Yellow
Biotinylated Antibody Diluent	NaN_3 (0.09%)	Blue
Streptavidin-HRP	2-methyl-2H -isothiazol-3-one (< 0.06%)	Clear amber
HRP Diluent	ProClin 300 (0.1%)	Green
Amplifier	Sodium Tetraborate decahydrate (<1.9%)	Colourless
Amplifier Diluent	H_2O_2 (< 0.01%)	Colourless
TMB Substrate	Not communicated (<5%)	Colourless
Stop reagent	Sulfuric Acid (4.2%)	Colourless

Odour: Odourless
pH: N/A
Melting point/Melting range: N/A
Boiling point/Boiling range: N/A
Flash point: N/A
Evaporation rate: N/A
Autoignition temperature: N/A
Danger of explosion: Product does not present an explosion hazard
Densitiy: N/A
Viscosity: N/A
Solubility in / Miscibility with water: Fully miscible

Section 10 - Stability and Reactivity

10.1 Reactivity
No available data

10.2 Chemical stability
Thermal decomposition: No decomposition if used according to specifications.
Light: TMB tinge in blue under light exposition.

10.3 Others

Hazardous reactions:

Sulfuric acid: produces hydrogen when contact of metals.

Reagents containing NaN_3: Toxic fumes when contact with acid.

Incompatibilities:

Sulfuric acid: with strong bases, alkali metals, organic materials, organic solvents, peroxides, permanganates, hydrides, phosphorus and phosphorous oxides.

Streptavidin-HRP: strong oxidising agents.

Reagents containing NaN_3: acid, metal, acid chloride.

Reagents containing Proclin 300: strong oxidising or reducing materials, amines.

Reagent containing Sodium tetraborate decahydrate: strong oxidising or reducing materials.

Reagent containing H_2O_2 : zinc, powdered metals, copper, nickel, brass, iron and iron salts.

TMB: with some common metals ions (such as iron).

Hazardous decomposition products:

Sulfuric acid: Toxic fumes of oxides of sulphur when heated. Reacts with carbonates to generate carbon dioxide gas, and with cyanide and sulfides to form poisonous hydrogen cyanide and hydrogen sulphide respectively. (concentrated Sulfuric Acid).

TMB: Decomposition products may include carbon oxides.

Section 11 - Toxicological Information

Route of entry: Skin Contact, Eye contact, Inhalation, Ingestion.

Effects of acute exposure to Product:

Acute poisoning may cause gastrointestinal irritation and renal failure. May be harmful if inhaled, swallowed or absorbed through the skin.

Effects of chronic exposure to Product:

Chronic ingestion may result in salicylism which is characterized by nausea, vomiting, gastrointestinal ulcers, and hemorrhagic strokes. Laboratory experiments have shown some mutagenic effects. Target organs: Kidneys and central nervous system.

Exposure Limits: Not available

Irritancy: Not available

Sensitization to Product: Not available

Carcinogenicity: IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Teratogenicity: Not available

Reproductive Toxicity: Not available

Mutagenicity: TMB possibly mutagenic, not proved.

Synergistic Products: Not available

Section 12 – Ecological Information

Toxicity: Harmful for aquatic life

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Results of PBT and vPvB: Not available

Others harmful effects: Hazardous for water

Section 13 – Disposal Considerations

Waste disposal: dispose of in accordance with local official environmental regulations.

Section 14 – Transport Information

Special shipping information: Does not need to be shipped as hazardous.

Section 15 – Regulatory Information

Labelling in accordance with EC directives
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EC Directives.

Section 16 – Other Information

This information is prepared on our present and best knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Full text of any Hazard statements under Section 3:
H300: Fatal if swallowed
H302: Harmful if swallowed
H310: Fatal in contact with skin
H314: Causes severe skin burns and eye damage
H315: Causes skin irritation
H317: May cause an allergic skin reaction
H318: Causes serious eye damage
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H360FD: May damage fertility or the unborn child
H400: Very toxic to aquatic life
H410: Very toxic to aquatic life with long lasting effects
H412: Harmful to aquatic life with long lasting effects
EUH032: Contact with acids liberates very toxic gaz

Abbreviations:
CAS: Chemical Abstracts Service
CLP: Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures
IARC: International Agency for Research on Cancer
PBT: Persistent, Bioaccumulativ, Toxic
vPvB: very Persistent, very Bioaccumulativ.
REACH: Registration, Evaluation, Authorization and restriction of CHemicals

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. DIACLONE SAS shall not be liable for any damages resulting from handling or from contact with the above products.