



Safety Data Sheet (SDS)

SECTION 1 – Identification

Product Name: Animal Free Recombinant Human Tumor Necrosis Factor Alpha (TNF- α)

Synonyms: TNF α , Cachectin

Catalog Number: HTNFA

Recommended Use: For research use only (RUO). Not for therapeutic or diagnostic use in humans or animals.

Manufacturer Contact:

Pacific Coast Biologics, INC.

2360 Eastman Ave, Suite 101, Oxnard, CA 93030, USA

Email: support@pacificcoastbio.com

Emergency Contact: Local poison control center or emergency medical services.

SECTION 2 – Hazard Identification

Classification (GHS):

Not classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Signal Word: None

Hazard Statements:

- May cause mild irritation to eyes, skin, or respiratory tract.
- Treat as potentially bioactive protein.

Precautionary Statements:

- Avoid inhalation, ingestion, or direct contact.
 - Wear protective gloves, lab coat, and safety goggles.
 - Wash hands thoroughly after handling.
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SECTION 3 – Composition/Information on Ingredients

Substance: Recombinant Human TNF- α (Animal Free)

CAS Number: 1077-84-9

EC Number: Not assigned

Formulation: Lyophilized protein with small traces of sodium phosphate, sodium chloride, and Dithiothreitol.

Concentration: Supplied in microgram (μg) quantities per vial

SECTION 4 – First Aid Measures

- **Inhalation:** Move to fresh air. Seek medical attention if symptoms occur.
 - **Skin Contact:** Wash with soap and water. Remove contaminated clothing.
 - **Eye Contact:** Rinse with water for at least 15 minutes. Seek medical care if irritation persists.
 - **Ingestion:** Rinse mouth with water. Do not induce vomiting. Seek medical advice if unwell.
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SECTION 5 – Firefighting Measures

Suitable Extinguishing Media: Water spray, CO₂, dry chemical, or foam.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides.

Protective Equipment: Firefighters should wear SCBA and full protective clothing.

SECTION 6 – Accidental Release Measures

- Avoid aerosol formation.
- Wear gloves, lab coat, and eye protection.
- Absorb spills with inert material (spill pads, paper towels).
- Clean contaminated surfaces with water and disinfectant.
- Dispose according to local regulations.



SECTION 7 – Handling and Storage

Handling:

- Handle using standard laboratory safety practices.
- Avoid inhalation, ingestion, or contact with skin/eyes.
- Use biosafety cabinet if aerosols may be generated.

Storage:

- Store lyophilized product at –20 °C or below.
- Store reconstituted aliquots at –80 °C.
- Protect from light, heat, and moisture.
- Avoid repeated freeze–thaw cycles.

SECTION 8 – Exposure Controls/Personal Protection

Exposure Limits: None established.

Engineering Controls: Work in well-ventilated area; biosafety cabinet recommended.

Personal Protective Equipment (PPE):

- Eye/Face: Safety goggles
- Hands: Nitrile or latex gloves
- Skin: Laboratory coat
- Respiratory: Not required under normal handling; use respirator if aerosolization occurs

SECTION 9 – Physical and Chemical Properties

- **Appearance:** White/off-white lyophilized powder; clear solution after reconstitution
- **Odor:** Odorless



- **Solubility:** Soluble in aqueous buffers
 - **pH:** Between pH 7.4 – 7.5 when reconstituted in purified water
 - **Stability:** Stable under recommended storage conditions
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SECTION 10 – Stability and Reactivity

Stability: Stable under recommended storage conditions.

Conditions to Avoid: Heat, light, repeated freeze–thaw cycles.

Incompatible Materials: Strong oxidizers.

Decomposition Products: Carbon oxides, nitrogen oxides upon combustion.

SECTION 11 – Toxicological Information

- **Acute Toxicity:** No data available
 - **Irritation:** May cause mild irritation to skin, eyes, or respiratory tract
 - **Sensitization:** No data available
 - **Carcinogenicity/Mutagenicity/Reproductive Toxicity:** No data available
 - **Notes:** Protein of biological origin; treat as potentially bioactive
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SECTION 12 – Ecological Information

- No ecological data available
 - Minimal environmental impact expected at laboratory-scale quantities
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SECTION 13 – Disposal Considerations

- Dispose of according to federal, state, and local regulations.
 - Decontaminate surfaces with disinfectant before disposal.
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SECTION 14 – Transport Information

UN Number: Not regulated

Proper Shipping Name: Non-hazardous laboratory reagent

Hazard Class: Not applicable

Packing Group: Not applicable

Special Precautions: Product is stable at ambient temperatures

SECTION 15 – Regulatory Information

- OSHA HCS: Not classified as hazardous
 - TSCA: Not listed
 - SARA Title III: Not listed
 - California Proposition 65: Not listed
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SECTION 16 – Other Information

Prepared by: Pacific Coast Biologics, INC.

Date Prepared: 03/01/2026

Revision Number: 1.0

This SDS is intended for laboratory safety guidance only. Users are responsible for safe handling and compliance with all applicable regulations.
