



Safety Data Sheet

Product Name: Recombinant Human TRAIL/TNFSF10 (E. coli-expressed)

Reviewed on: 11 April 2012

1. Identification of Substance:

- Other means of identification: Catalog Number: 375-TEC
- GHS product identifier: Recombinant Human TRAIL/TNFSF10 (E. coli-expressed)
- Application of the substance / the preparation: For Research Use Only
- Manufacturer/Supplier:
R&D Systems Inc.
614 McKinley Place N.E.
Minneapolis, MN 55413
USA
1-800-343-7475
- Emergency information: In case of a chemical emergency, spill, fire, or exposure, call R&D Systems at (612) 379-2956 or (800)-343-7475. In Europe call +44(0)1235-529449.

2. Hazards Identification:

- Classification: Zinc Sulfate <0.1%.
Not hazardous at this concentration. The classification was made according to the latest edition of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
- Special Hazards: N/A
- Routes of exposure: Inhalation; ingestion or skin.
IF EXPOSED OR CONCERNED: Get medical advice/attention.

3. Information on Ingredients:

- Description: Zinc Sulfate Heptahydrate

Contains	CAS No.	EC-No.	Index-No.	Content
Zinc Sulfate Heptahydrate	7446-20-0	231-793-3	030-006-00-9	<0.1%

4. First Aid Measures:

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly. Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Rinse mouth with water. Seek medical attention and appropriate follow-up.

5. Fire Fighting Measures:

- Suitable extinguishing agents: The product is non-flammable.
- Protective equipment: No special measures required.

6. Accidental Release Measures:

- Person-related safety precautions: Use standard laboratory practices including proper personal protective equipment.
- Measures for environmental protection: N/A.
- Measures for containment and cleaning:
 - Absorb liquid components with liquid-binding material.
 - Pick up mechanically.
 - Dispose contaminated material as waste according to item 13.
- Additional information: No dangerous substances are released.



Safety Data Sheet

Product Name: Recombinant Human TRAIL/TNFSF10 (E. coli-expressed)

Reviewed on: 11 April 2012

7. Handling and Storage:

- **Precautions for safe handling:** No special measures required. No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage:** Store according to product specifications.

8. Exposure Controls and Personal Protection:

- **Control parameters:** None known.
- **Appropriate engineering controls:** Follow usual standard laboratory practices. The following personal protection is recommended:
 - Gloves made of latex, nitrile rubber
 - Safety glasses
 - Protective work clothing.

9. Physical and Chemical Properties:

- **Appearance:** Lyophilized white powder or clear liquid
- **Odor:** Little to none
- **Odor threshold:** Not available
- **pH:** Not available
- **Melting point/freezing point:** Not available.
- **Boiling point/Boiling range:** Not available.
- **Flash point:** Not available.
- **Evaporation rate:** Undetermined.
- **Flammability:** Not available.
- **Upper/lower flammability or explosive limits:** Not available.
- **Vapor pressure/density:** Not available.
- **Relative Density:** Not available.
- **Solubility in/Miscibility with Water:** Not available.
- **Partition coefficient: octanol/water:** Not available
- **Auto igniting:** Product is not self igniting.
- **Decomposition temperature:** Not available.
- **Viscosity:** Not available.

10. Stability and Reactivity:

- **Reactivity:** no data available.
- **Chemical Stability:** Stable under normal ambient and storage and handling temperatures.
- **Thermal decomposition/conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials to be avoided:** Strong oxidizing agents.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11. Toxicological Information:

- **Acute toxicity:** No toxic effect known at this concentration.
- **Skin irritant effect:** No toxic effect known at this concentration.
- **Eye irritant effect:** No toxic effect known at this concentration.
- **Sensitization:** No sensitizing effects known at this concentration.
- **Mutagenicity:** No effect known at this concentration.
- **Carcinogenicity:** No effect known at this concentration.
- **Reproductive toxicity:** No toxic effect known at this concentration.
- **Additional toxicological information:** When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. Ecological Information:

- **Ecotoxicity:** This substance is toxic to aquatic organisms. No toxic effects known at this concentration.
- **Biodegradability:** Undetermined.
- **Mobility:** Undetermined.



Safety Data Sheet

Product Name: Recombinant Human TRAIL/TNFSF10 (E. coli-expressed)

Reviewed on: 11 April 2012

13. Disposal Considerations:

- **Disposal methods:** Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Contaminated packaging:** Dispose in the same manner as unused product.
- **Special precautions:** Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilt material to soil, waterways, drains and sewers.

14. Transport Information:

- **UN Number:** None
- **DOT regulations:** Hazard class: None
- **Land transport ADR/RID (cross-border):** Not regulated.
- **Maritime transport IMDG:** Not regulated.
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:** Not regulated.
- **Transport/Additional information:** Not dangerous according to the above specifications.

15. Regulations:

- **US Federal and State Regulations**
 - TSCA (Toxic Substances Control Act):** Zinc Sulfate Heptahydrate is not listed.
 - SARA 313:** Zinc Sulfate Heptahydrate is not listed.
 - SARA 311/312 Hazards:** none
 - CERCLA Reportable Quantity:** none
 - California Proposition 65:** Zinc Sulfate Heptahydrate is not listed on California's listing of known or potential carcinogens.

16. Other Information:

- **Notice to reader:** To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.