

Universal Tetanus Toxin Epitope P2 (830-844)

Cat#: orb321766 (MSDS)

Section 1. Product and Company Identification

Product Name Universal Tetanus Toxin Epitope P2 (830-844)

Chemical Name (Synonyms) TT (830-844), TT P2, Tetanus Toxin (830-844)

Section 2. Hazards Identification

GHS Classification Not classified. Caution - substance not yet fully tested.

GHS Label elements including precautionary statements

Hazard and precautionary statements Not classified. Caution - substance not yet fully tested.

HMIS Classification Not classified. Caution - substance not yet fully tested.

NFPA Rating Not classified. Caution - substance not yet fully tested.

Potential Health Effects

Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.

Skin - May be harmful if absorbed through skin. May cause skin irritation.

Eyes - May cause eye irritation.

Ingestion - May be harmful if swallowed.

Section 3. Composition/Information on Ingredients

Substances Ingredient: Universal Tetanus Toxin Epitope P2 (830-844) Percent: 100

Formula C₈₀H₁₂₉N₁₉O₂₃

Formula Wt 1725.03

Section 4. First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact

Flush eyes with water as a precaution.

Skin Contact

Wash off with soap and plenty of water.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 . Firefighting Measures**Flash Point**

Not available.

Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Firefighting Procedures

Wear self-contained breathing apparatus for fire fighting if necessary.

Unusual Fire Hazards

Carbon oxides, nitrogen oxides (NO_x).

Section 6. Accidental Release Measures

Personal Precautions Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist, or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage**Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C

Hazardous Decomposition Products Not available.

Section 8. Exposure Controls/Personal Protection**Personal protective equipment****EXPOSURE CONTROLS**

Contains no substances with occupational exposure limit values. General industrial hygiene practice.

PERSONAL PROTECTION

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State Solid.

Color White to off white powder

Boiling Point Not available.

Melting Point Not available.

Solubility Not available.

Flash Point Not available.

Lower explosion limit Not available.

Upper explosion limit Not available.

Water solubility Not available.

Partition coefficient: n-octanol/water Not available.

Relative vapor density Not available.

Volatility Not available.

Density Not available.

pH Not available.

Ignition temperature Not available.

Autoignition temperature Not available.

Vapor pressure Not available.

Odor Not available.

Odor Threshold Not available.

Evaporation rate Not available.

Section 10. Stability and Reactivity

Stability

Stable under recommended storage conditions.

Materials To Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Not available

Possibility of hazardous reactions

Not available.

Conditions to avoid

Not available.

Section 11. Toxicological Information

Oral LD50 Not available.

Inhalation LC50 Not available.

Dermal LD50 Not available.

Other information on acute toxicity Not available.

Skin corrosion/irritation Not available.

Serious eye damage/irritation Not available.

Respiratory or skin sensitization Not available.

Germ cell mutagenicity Not available.

Reproductive Toxicity Not available.

Teratogenicity Not available.

Specific organ toxicity single exposure (GHS) Not available.

Specific organ toxicity repeated exposure (GHS) Not available

Aspiration Hazard Not available.

Signs and symptoms of exposure Not available.

Synergistic effects Not available.

Additional Information Not available.

Potential**Health Effects**

Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.

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Ingestion - May be harmful if swallowed.

Carcinogenicity Not classified. Caution - substance not yet fully tested.

Section 12. Ecological Information

Toxicity Not available. **Mobility in soil** Not available.

PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Persistence and degradability Not available.

Other adverse effects Not available.

Bioaccumulative potential Not available.

Section 13. Disposal Considerations

Waste Disposal

Dispose of material according to all federal, state and local regulations.

Offer material to a licensed, professional waste disposal company to dispose of as unused product.

Section 14. Transport Information

DOT (US) Not dangerous goods

IATA Not dangerous goods.

IMDG Not dangerous goods.

Section 15. Regulatory Information

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components No SARA hazards.

Massachusetts Right

To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right

To Know Components

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New Jersey Right

To Know Components

Universal Tetanus Toxin Epitope P2 (830-844)

California Prop 65

Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.