

DL-DTT

SECTION 1: PRODUCT IDENTIFICATION

Product Name: DL-DTT
Product Code: TMB 031
CAS#: 6892-68-8
Synonym: 1,4-Dithioerythritol
Chemical Name: erythro-2,3-Dihydroxy-1,4-butanedithiol
Chemical Formula: C₄H₁₀O₂S₂
Formula Weight: 154.25

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:
Name: COPPER (II) SULFATE PENTAHYDRATE
Toxicological Data on Ingredients: Acute Tox. 4; Aquatic Chronic 3; H302, H412

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Potential Acute Health Effects:
Acute toxicity, Oral (Category 4), H302
Potential Chronic Health Effects:
Long-term (chronic) aquatic hazard (Category 1), H412
Carcinogenic Effects: Not available.
Mutagenic Effects: Not available.
Teratogenic Effects: Not available.
Developmental Toxicity: Not Available

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact: Wash off immediately with soap and plenty of water. Cover the irritated skin with emollient. Immediate medical attention is required.
Serious Skin Contact: Not available.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation: Not Available.
Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion: Not available.

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture



Carbon oxides, Sulphur oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

Storage conditions:

Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

Recommended storage temperature 2 - 8 °C

Storage class:

Not available

SECTION 8: EXPOSURE CONTROLS/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.

Respiratory protection

Respiratory protection is not required. If protection from nuisance levels of dusts are desired, use type N95 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 and appearance	:	Powder
Odor	:	Not available
Color	:	White
Molecular Weight	:	Not available
pH	:	Not available
Boiling Point	:	Not available
Melting Point	:	Not available
Critical Temperature	:	Not available
Specific Gravity	:	Not available
Vapor Pressure	:	Not available
Vapor Density	:	Not available
Volatility	:	Not available



Odor Threshold	:	Not available
Water/Oil Dist. Coeff.	:	Not available
Ionicity (in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions (room temperature).

Instability Temperature: Bases, Oxidizing agents, Reducing agents, Alkali metals

Conditions of Instability: Not available

Incompatibility with various substances: Not available

Special Remarks on Corrosivity: Non corrosive.

Special Remarks on Reactivity: Not available

Possibility of hazardous reactions: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur Oxides

Hazardous decomposition products: In case of fire.

SECTION 11: TOXICOLOGICAL INFORMATION.

Acute Toxicity: No data available

Inhalation: No data available

Dermal: No data available

Routes of Entry: Inhalation, Ingestion

Toxicity to Animals:

LD50 Oral - Rat - 400 mg/kg

Chronic Effects on Humans: Not available

Other Toxic Effects on Humans: Not available

Special Remarks on Toxicity to Animals: Not available

Special Remarks on other Toxic Effects on Humans: Not available

Potential Health Effects: Not available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Toxicity to daphnia
and other aquatic
invertebrates

EC50 - Daphnia magna (Water flea) - 27 mg/l - 48 h

BOD and COD:

Not available

Products of Biodegradation: Not available

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:



ADR/RID:	IMDG:	IATA:
UN proper shipping name		
ADR/RID: Not dangerous goods		
IMDG: Not dangerous goods		
IATA: Not dangerous goods		
Transport hazard class(es):		
ADR/RID:	IMDG:	IATA:
Packaging group:		
ADR/RID:	IMDG:	IATA:
Environmental hazards:		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements:

H302 Harmful if swallowed.

H412 Harmful to aquatic life with long lasting effects.

Other Special Considerations: Not available

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