

TRIS(HYDROXYMETHYL)AMINOMETHANE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: Tris(hydroxymethyl)aminomethane

Product Code: TMB 079

CAS#: 77-86-1 Synonym: Free Base

Chemical Name: Not available. Chemical Formula: C₄H₁₁NO₃ Formula Weight: 121.14

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: Tris(hydroxymethyl)aminomethane Toxicological Data on Ingredients: Not available

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Potential Acute Health Effects: Not available. Potential Chronic Health Effects: Not available

Mutagenic Effects: Not available. Teratogenic Effects: Not available. **Developmental Toxicity:** Not available. Specific target organ 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

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

Nitrogen oxides (NOx)

Carbon oxides

Nitrogen oxides (NOx)

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by Keeping a safe distance or by wearing suitable protective clothing.

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

Avoid generation of vapours/aerosols.

Storage conditions:

Tightly closed. Dry.

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 Crystalline : Odor Not available Color White **Molecular Weight** Not available Not available рΗ **Boiling Point** Not available

Melting Point Not available **Critical Temperature** Not available **Specific Gravity** Not available











MATERIAL SAFETY DATA SHEET

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: Not available **Conditions of Instability:** Not available

Incompatibility with various substances: Strong oxidizing agents

Special Remarks on Corrosivity: Non-corrosive. **Special Remarks on Reactivity:** Not available

Possibility of hazardous reactions: Violent reactions possible with:

Oxidizing agents Bases

Hazardous decomposition products: In the event of fire.

SECTION 11: TOXICOLOGICAL INFORMATION.

Acute Toxicity:

LD50 Oral - Rat - female - > 5.000 mg/kg

LD50 Dermal - Rat - male and female - > 5.000 mg/kg

Inhalation: Not available Dermal: Not available

Routes of Entry: Not available **Toxicity to Animals:** Not available

Chronic Effects on Humans: Not available
Other Toxic Effects on Humans: Not available.
Special Remarks on Toxicity to Animals: Not available

Special Remarks on Toxicity to Aminiais. Not available

Special Remarks on other Toxic Effects on Humans: Not available

Reproductive toxicity: Not available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - > 980 mg/l - 48 h

and other aquatic invertebrates

Toxicity to bacteria static test EC50 - activated sludge - > 1.000 mg/l - 3 h

BOD and COD: Not available

Products of Biodegradation: Not available Toxicity of the Products of Biodegradation: Biodegradability aerobic - Exposure time 28 d Result: 97,1 % - Readily biodegradable.

Special Remarks on the Products of Biodegradation: Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:











MATERIAL SAFETY DATA SHEET

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: Not available.

Other Special Considerations: Not available

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.









