



Section 1. Product and Company Identification

**Product Name** Trimethylolpropane  
**CAS Number** 77-99-6

**Parchem - fine & specialty chemicals**  
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**New Rochelle, NY 10801**  
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Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**  
**GHS Classification:** Not classified as hazardous.

**Signal word:** Warning

**Hazard and precautionary statements**  
H303: May be harmful if swallowed.

Section 3. Composition / Information on Ingredients

**Common Name** Trimethylolpropane  
**Synonym(s)** TMP, 3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
**CAS Number** 77-99-6

COMPONENT	CAS NUMBER	CONCENTRATION
Trimethylolpropane	77-99-6	> 98%

Section 4. First Aid Measures

**Eyes:** Immediately flush with plenty of water at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses. Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed.

**Skin:** Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If irritation persists, contact physician.

**Ingestion:** Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Get medical attention immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth respiration. If breathing has ceased, apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**Notes to physicians or first aid providers:** Treat symptomatically and supportively.



Section 5. Firefighting Measures

**HMIS hazard classification**

**Health:** 1

**Flammability:** 1

**Reactivity:** 0

**Protection:** B

**Extinguishing media:** Use carbon dioxide/dry chemical for small fires. Use alcohol-type aqueous film-forming foam or water spray for large fires. Do not use a solid water stream as it may scatter and spread fire.

**Special firefighting procedures:** Combustion may produce irritating vapor.

**Unusual fire and explosion hazards:** Can form an explosive organic dust cloud. Do not use compressed air to transfer this material. Protect against electrostatic charges.

**Hazardous decomposition products:** Combustion may product irritant fumes and carbon monoxide.

Section 6. Accidental Release Measures

**Accidental release measures:** Avoid contact with skin and eyes. Avoid breathing dust. Keep away from heat and sources of ignition. Sweep up and store in disposal drums for disposal according to local, state, and federal regulations. Keep away from soil, sewers, rivers, or drinking water system.

Section 7. Handling and Storage

**Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling. This product should be stored at ambient temperature in a dry, well-ventilated location.

**Storage:** Keep container tightly closed. Avoid generation of excessive dust. Ground all equipment when transferring to avoid building up a static charge.

Section 8. Exposure Controls / Personal Protection

**OSHA PEL (General Dust):** 15 mg/m<sup>3</sup> (inhalable fraction); 5 mg/m<sup>3</sup> (respirable fraction)

**ACGIH TLV-TWA (General Dust):** 10 mg/m<sup>3</sup> (inhalable fraction); 3 mg/m<sup>3</sup> (respirable fraction)

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Ventilation:** Local exhaust recommended when appropriate to control employee exposure. MECH(GEN) NOT recommended as sole means of controlling employee exposure. Explosion-proof equipment should be used in mechanical ventilating systems.



**Respiratory protection:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**Eye protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin protection:** Wear impervious body covering and boots. (PVC/Nitrile Rubber) A safety shower and eye bath should be available.

**Work hygienic practices:** Wash thoroughly with soap and water after handling. Wash contaminated clothing before reusing.

#### Section 9. Physical and Chemical Properties

**Appearance:** White, waxy hygroscopic flakes.

**Odor:** Mild aromatic odor

**Flammable limits in air**

**Upper:** 11.8% vol. **Lower:** 2% vol.

**Flash point (Open Cup):** 355°F (179°C)

**Auto ignition temperature:** 707°F (375°C)

**Boiling point:** 552°F (289°C)

**Melting point:** 138°F (59°C)

**Vapor pressure (mm Hg/70°F):** < 1

**Vapor density (AIR = 1):** 4.6

**pH =** 5.6

**Log PO/W:** -0.47

**Solubility in water (20°C):** >100 g/L

**Bulk density:** 0.6 - 0.8 g/mL at 20°C

**Evaporation rate:** Not available

**Viscosity:** 100 mPa.s (70°C)

**Molecular weight;** 134.17

#### Section 10. Stability and Reactivity

**Stability:** Stable

**Conditions to avoid (stability):** Heat, sparks, flames; incompatible materials. Dust can form an explosive mixture in air.

**Incompatibility (material to avoid):** Strong oxidizing agents, strong acids, acid chlorides and acid anhydrides.

**Hazardous decomposition or by-products:** Carbon monoxide and dioxide may be produced in burning.

**Hazardous polymerization:** Will not occur.

**Conditions to avoid (polymerization):** Not applicable.

**Notes:** This product may react with strong oxidizers. Avoid generation of excessive dust, it is recommended that TMP not be used in formulations with Phosphorus/Phosphorus derivatives that may be subject to pyrolysis conditions unless fully tested to supply data.

Section 11. Toxicological Information

**Acute toxicity**

LD50 = 14.700 mg/Kg (oral, rat)  
LD0 = 10.000 mg/Kg (skin, rat) - no deaths  
LC0 = 0.85 mg/l/4h (inhalation, rat) - no deaths

**Irritation**

Eye irritation rabbit: not irritating  
Skin irritation rabbit: not irritating

**Sensitization**

Skin: No data available

**Mutagenicity (AMES Test):** Negative

**Repeated dose toxicity**

Subacute: NOAEL 200 mg/Kg/day (28 days) oral, rat  
Subchronic: NOAEL 67 mg/Kg/day (28 days) oral, rat

**Carcinogenicity**

**OSHA:** No  
**NIOSH:** No  
**NTP:** No  
**IARC:** No

Section 12. Ecological Information

**Bioaccumulation:** log BCF<1

**Degradation**

Biotic: 98% (14d) OECD 302B  
Abiotic: COD=1,620 mgO<sub>2</sub>/g Hydrolytically stable

**Aquatic toxicity**

Fish LC50 >= 1,000 mg/l (48 h) *Leucius idus*  
Daphnia EC50 > 1,000 mg/l (96 h) *Nicotra spinipes*

Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.



Section 14. Transport Information

**U.S. department of transportation**

**Proper shipping name:** Trimethylolpropane

**Hazard class:** Not regulated

**Water transportation**

**Proper shipping name:** Trimethylolpropane

**Hazard class:** Not regulated

**Air transportation**

**Proper shipping name:** Trimethylolpropane

**Hazard class:** Not regulated

Section 15. Regulatory Information

**U.S. Federal Regulations**

**TSCA (Toxic Substance Control Act):** Listed under CAS# 77-99-6

**TSCA 12 (b) Export Notification:** Not listed.

**CERCLA (Comprehensive Response Compensation, and Liability Act):** Not regulated

**SARA TITLE III**

**Section 302 (40 CFR 355.30):** Not regulated

**Section 303 (40 CFR 355.40):** Not regulated

**Section 311/312 hazard categories**

**Acute:** Yes

**Chronic:** No

**Fire:** No

**Reactive:** No

**Sudden Release:** No

**Section 313 (40 CFR 372.65):** Not regulated

**OSHA Process Safety (29CFR1910.119):** Not regulated

**State Regulations**

**California Proposition 65:** Not regulated

**International Regulations**

**Canadian:** WHMIS Classification: Not determined

**European Community**  
**German regulations**  
**Water hazard class (WGK)**  
**State of Classification:** VwVwS  
**Classification under hazard to water:** 1

**National Inventory Status**

**DSL:** Listed  
**EINECS:** Listed  
**ENCS:** Listed  
**AICS:** Listed  
**ECL:** Listed. (Serial # KE-13838)  
**SWISS:** Listed (G-5932)  
**PICCS:** Listed.  
**ASIA/PAC:** Listed

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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