

Material Safety Data Sheet

According to 91/155 EEC(2001/58 EC)

Printing date: 17.01.2007

Reviewed on: 17.01.2007

1 Identification of substance:

- **Product details:**
- **Trade name:** Trimethylolpropane (TMP)
- **Application of the substance / the preparation** Manufacturing of synthetic resins
- **Supplier/Manufacturer:**
 Penpet Petrochemical Trading GmbH
 Merkur-Park
 Sieker Landstrasse 126
 22143 Hamburg
 Germany
 Tel: +49 40 675 799 0
 Fax: +49 40 675 799 99 / 88
- **Information department:** see above
- **Emergency information:** National Poisons Information Centre Tel.: +44 (0)870 6006266

2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**
77-99-6 propylidynetrimehanol
- **Identification number(s):**
- **EINECS Number:** 201-074-9

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for man and environment:**
 According to current European laws and regulations the product is not dangerous or toxic material (based on the available data).
- **Classification system:**
 The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

4 First aid measures

- **General information:** If symptoms persist or in case of doubt seek medical advice.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Wash with water and soap and rinse with plenty of water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
 Rinse out mouth and then drink plenty of water.
 Induce vomiting, only if affected person is fully conscious.
 If symptoms persist consult doctor.
- **Information for doctor:**
- **Treatment:** Symptomatic treatment

5 Fire fighting measures

- **Suitable extinguishing agents:**
 Use fire fighting measures that suit the environment.
 CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
 Dangerous decomposition product see chapter 10: stability and reactivity
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information:**
 Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**

Ensure adequate ventilation

Avoid formation of dust.

Use respiratory protective device against the effects of fumes/dust/aerosol.

- **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

- **Measures for cleaning/collecting:**

Pick up mechanically.

Avoid dust formation absolutely. If necessary pick up with a tested and approved industrial vacuum cleaner.

Send for recovery or disposal in suitable receptacles.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

- **Information about protection against explosions and fires:**

Dust can combine with air to form an explosive mixture.



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Store container tightly sealed at a cool and dry place with sufficient ventilation.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from feed.

- **Further information about storage conditions:**

Protect from humidity and water.

This product is hygroscopic.

- **Storage class** 11 Combustible solids

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:** Not required.

- **Additional Occupational Exposure Limit Values for possible hazards during processing:**

Observe general threshold limit for dust.

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not inhale dust / smoke / mist.

Avoid close or long term contact with the skin.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Use skin protection cream for skin protection.

- **Breathing equipment:**

At formation of dust:

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Short term filter device:

Filter P1.

· **Protection of hands:**

Chemical resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

After use of gloves apply skin-cleaning agents and skin cosmetics.

· **Material of gloves:**

For undissolved solid substances following materials may be suitable:

Nitrile rubber, NBR

Butyl rubber, BR

Polychloroprene rubber (CR)

Fluorocarbon rubber (FKM)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material:**

The exact break-through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** At formation of dust or insufficient ventilation: Tightly sealed goggles.

· **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· **General Information**

Form:	Solid.
Colour:	White
Odour:	Weak, characteristic

· **Change in condition:**

Melting point/Melting range:	58°C
Boiling point/Boiling range:	160/6.7mbar°C

· **Flash point:** 184°C

· **Ignition temperature:** 375°C

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/dust mixtures is possible.

· **Explosion limits:**

Lower:	2 Vol %
Upper:	11.8 Vol %

· **Density:** Not determined

· **Bulk density at 20°C:** ~ 700 kg/m³

· **Solubility in / Miscibility with**

Water: Easily soluble

· **pH-value (100 g/l) at 20°C:** 6.5

· **Segregation coefficient (n-octanol/water):** -1.48 log POW

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

To avoid thermal decomposition do not overheat.

Conditions to be avoided: see chapter 7

· **Materials to be avoided:** Strong oxidants

· **Dangerous reactions:** Violent reaction with oxidizing agents.

· **Dangerous products of decomposition:** No dangerous decomposition products known

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 · **Additional information:** Hygroscopic

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
 - Oral LD₅₀ > 5000 mg/kg (rat)
 - Dermal LD₅₀ > 500 mg/kg (rat)
- **Primary irritant effect:**
 - **on the skin:** No irritation, but slight irritation or redness is possible after long or repeatedly mechanical contact.
 - **on the eye:** Eye irritation is possible after mechanical influence (dust).
- **Sensitization:** Not sensitizing (human).
- **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.
 - The substance is not subject to classification according to the latest version of the EU lists.

12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Other information:**
 - It is not readily biodegradable.
 - Easily to be eliminated.
- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:** Log POW < 0 - not lipophilic, no bioaccumulation.
- **Ecotoxic effects:**
- **Aquatic toxicity:**
 - EC₅₀/48h > 13000 mg/l (daphnia sp.)
 - LC₅₀/48h ≥ 1000 mg/l (leuciscus idus)
- **General notes:**
 - Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water.
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal according to instructions of local authorities.
- **European waste catalogue:**
 - 07 01 99 wastes not otherwise specified
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** No hazardous good according to the regulation.
- **Maritime transport IMDG:**
- **IMDG Class:** No hazardous good according to the regulation.
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** No hazardous good according to the regulation.

15 Regulations

- **Markings according to EC guidelines:**
 - The substance(product)is not subject to classification according to EC-directives and other sources of literature known to us.

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Observe the general safety regulations when handling chemicals

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· National regulations**· Water hazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS:

KFT-Chemieservice Marienstr. 3 D-64347 Griesheim

Postfach 1451 D-64345 Griesheim

Tel.: +49-6155-823241 Fax: +49-6155-823246

· Contact: Angelika Torges**· Sources:** ESIS (European existing Substances Information System)

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Penpet - Chemical trading
safe chemical trade worldwide