OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai - 400002, India. Tel : + 91 22 2207 0099 / 6638 2599 Email : info@ottokemi.com, Web : www.ottokemi.com ---ISO 9001: 2015----

MATERIAL SAFETY DATA SHEET

1.1GHS Product identifier Trimethylol propane, 98% 2.Hazard identification 2.1Classification of the substance or mixture 2.2GHS label elements, including precautionary statements No symbol. No signal word. Hazard statement(s) none

Precautionary statement(s) Prevention none Response none Storage none Disposal none 2.3 Other hazards which do not result in classification none

3.Composition/information on ingredients

3.1Substances	1 March		~	1 ()
Chemical name	Common names and	CAS	EC	Concentration
	synonyms	number	number	Concentration
2-Ethyl-2-	2-Ethyl-2-			
(Hydroxymethyl)-1,3-	(Hydroxymethyl)-1,3-	77-99-6	none	100%
Propanediol	Propanediol	1		

4.First-aid measures

4.1Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

1.Identification

Code T 2230

Not classified.

Pictogram(s)

Signal word

Fresh air. rest.

In case of skin contact

Remove contaminated clothes. Rinse skin with plenty of water or shower.

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention. If swallowed

Rinse mouth.

4.2Most important symptoms/effects, acute and delayed

no data available

4.3Indication of immediate medical attention and special treatment needed, if necessary no data available

5.Fire-fighting measures 5.1Extinguishing media Suitable extinguishing media Use water spray, powder, alcohol-resistant foam, carbon dioxide. 5.2Specific hazards arising from the chemical no data available 5.3Special protective actions for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1Personal precautions, protective equipment 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. For personal protection see section 8.

6.2Environmental precautions

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered containers. Wash away remainder with plenty of water. 6.3Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7.Handling and storage 7.1Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2. 7.2Conditions for safe storage, including any incompatibilities Separated from strong oxidants. Dry. Well closed. 8.Exposure controls/personal protection 8.1Control parameters Occupational Exposure limit values no data available **Biological limit values** no data available 8.2Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 8.3 Individual protection measures, such as personal protective equipment (PPE) Eye/face protection Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Respiratory protection Wear dust mask when handling large quantities. Thermal hazards no data available 9. Physical and chemical properties crystalline flakes Physical state WHITE POWDER OR PLATES Colour Odour no data available Melting point/ freezing 15\u00b0C(lit.) point Boiling point or initial 149\u00b0C/2mmHg(lit.) boiling point and boiling range Flammability Combustible. Lower and upper no data available explosion limit / flammability limit Flash point 64\u00b0C(lit.) Auto-ignition ~375\u00b0C temperature Decomposition no data available temperature no data available pН . Kinematic viscosity no data available In water:soluble Solubility Partition coefficient n- -0.5 octanol/water (log value) Vapour pressure <1 mm Hg (20 \u00b0C) Density and/or relative 1.176 density Relative vapour 4.8 (vs air) density Particle characteristics no data available 10.Stability and reactivity 10.1Reactivity no data available 10.2Chemical stability

Stable under recommended storage conditions. 10.3Possibility of hazardous reactions no data available 10.4Conditions to avoid no data available 10.5Incompatible materials no data available 10.6Hazardous decomposition products no data available

11 Toxicological information Acute toxicity Oral: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available STOT-single exposure no data available STOT-repeated exposure no data available Aspiration hazard no data available

12.Ecological information 12.1Toxicity Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available 12.2Persistence and degradability no data available 12.3Bioaccumulative potential no data available 12.4Mobility in soil no data available 12.5Other adverse effects no data available 12.5Other adverse effects

13.Disposal considerations 13.1Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14.Transport information

14.1UN Number

ADR/RID: UN3265 IMDG: UN3265 IATA: UN3265 14.2UN Proper Shipping Name ADR/RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. 14.3Transport hazard class(es) ADR/RID: 8 IMDG: 8 IATA: 8 14.4Packing group, if applicable ADR/RID: II IMDG: II IATA: II 14.5Environmental hazards

14.6Special precautions for user

no data available

14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15.Regulatory information

15.1Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and	CAS	EC
	synonyms	number	number
2-Ethyl-2-(Hydroxymethyl)- 1,3-Propanediol	2-Ethyl-2-(Hydroxymethyl)- 1,3-Propanediol	77-99-6	none
European Inventory of Exist Substances (EINECS)	Listed.		
EC Inventory	Listed.		
United States Toxic Substa	Listed.		
China Catalog of Hazardou	Not Listed.		
New Zealand Inventory of C	Listed.		
Philippines Inventory of Che (PICCS)	Listed.		
Vietnam National Chemical	Listed.		
Chinese Chemical Inventor (China IECSC)	Listed.		

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.