An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Hexylene glycol, 99% Product Code: H 1389 CAS No : 107-41-5

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email <u>info@ottokemi.com</u>

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Reproductive toxicity (Category 2), H361d For the full text of the H-Statements mentioned in this Section, see Section 16 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Warning Hazard statement(s) H315 H319 H361d Precautionary statement(s) P202

P264 P280

P302 + P352 P305 + P351 + P338

P308 + P313 Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard statement(s) H361d Precautionary statement(s) P202

P280

Causes skin irritation. Causes serious eye irritation. Suspected of damaging the unborn child.

Do not handle until all safety precautions have been read and understood. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. none Warning Suspected of damaging the unborn child.

Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/ eye protection/ face

protection. IF exposed or concerned: Get medical advice/ attention.

none

DISCLAIMER

P308 + P313

Supplemental Hazard

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otto chemie pvt ltd

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Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.1 Substances	
Synonyms	: (±)-2-Methyl-2,4-pentanediol
	MPD
Formula	: C6H14O2
Molecular weight	: 118,17 g/mol
CAS-No.	: 107-41-5
EC-No.	: 203-489-0



Component	Classification	Concentration
(±)-2-Methyl-2,4-pentanediol		
CAS-No. 107-41-5	Skin Irrit. 2; Eye Irrit. 2; Repr. 2; H315,	<= 100 %
EC-No. 203-489-0	H319, H361d	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures General advice Show this material safety data sheet to the doctor in attendance. If inhaled After inhalation: fresh air. Call in physician. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician. In case of eye contact After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses. If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2) Foam Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

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Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 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.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Store under inert gas. Hygroscopic. Storage class Storage class (TRGS 510): 10: Combustible liquids 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: 480 min

Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M) This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

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Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 240 min Material tested:KCL 741 Dermatril® L **Body Protection** protective clothing Respiratory protection Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state liquid b) Color colorless c) Odor sweet, mild d) Melting Melting point/range: -40 °C - lit. point/freezing point e) Initial boiling point 197 °C - lit. and boiling range f) Flammability (solid, No data available gas) g) Upper/lower Upper explosion limit: 7,4 %(V) flammability or Lower explosion limit: 1,3 %(V) explosive limits h) Flash point 94 °C - closed cup i) Autoignition No data available temperature j) Decomposition No data available temperature k) pH 6.0 - 8.0 at 118.2 g/l at 25 °C I) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: 36 mPa.s at 20 °C ca.118,2 g/l at 20 °C m) Water solubility n) Partition coefficient: log Pow: 0,58 - (Lit.), Bioaccumulation is not expected. n-octanol/water o) Vapor pressure 0.03 hPa at 20 °C 0,925 g/cm3 at 25 °C - lit. p) Density Relative density No data available q) Relative vapor No data available density r) Particle No data available characteristics s) Explosive properties No data available t) Oxidizing properties none 9.2 Other safety information Relative vapor 4,08 - (Air = 1.0)density **SECTION 10: Stability and reactivity** 10.1 Reactivity Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Violent reactions pessible with

Violent reactions possible with:

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mineral acids Strong oxidizing agents 10.4 Conditions to avoid Avoid moisture. Strong heating. 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products In the event of fire: see section 5 **SECTION 11: Toxicological information** 11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available. **SECTION 12: Ecological information** 12.1 Toxicity Toxicity to fish flow-through test LC50 - Gambusia affinis (Mosquito fish) - 8.510 mg/l - 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 5.410 mg/l - 48 h (OECD Test Guideline 202) Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 429 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - Pseudokirchneriella subcapitata (green algae) -429 mg/l - 72 h (OECD Test Guideline 201) Toxicity to bacteria EC50 - Photobacterium phosphoreum - 3.070 mg/l - 5 min Remarks: (IUCLID) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d Result: 81 % - Readily biodegradable. (OECD Test Guideline 301F) 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects Discharge into the environment must be avoided.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods No data available

SECTION 14: Transport information

14.1 UN number			
ADR/RID: -		IMDG: -	IATA: -
14.2 UN proper s	hipping name		
ADR/RID	: Not dangerous goods		
IMDG	: Not dangerous goods		
IATA	: Not dangerous goods		
14.3 Transport ha	azard class(es)		
ADR/RID: -		IMDG: -	IATA: -
14.4 Packaging g	roup		
ADR/RID: -		IMDG: -	IATA: -
14.5 Environment	tal hazards		C.
ADR/RID: no		IMDG Marine pollutant: no	IATA: no
14.6 Special prec	autions for user		
No data available			
Further information	on		
Not classified as	dangerous in the meaning of transport re	egulations.	
SECTION 15: Re	gulatory information		
15.1 Safety, healt	th and environmental regulations/legislat	ion specific for the	
substance or mixt	ture		

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Authorisations and/or restrictions on use Other regulations Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work. 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

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.

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