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: 2-Ethylhexyl methacrylate, 98% Product Code: E 1578 CAS No : 688-84-6

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 Skin sensitization (Category 1), H317 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Long-term (chronic) aquatic hazard (Category 3), H412 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 Causes skin irritation. May cause an allergic skin reaction. H317 H319 Causes serious eye irritation. May cause respiratory irritation. H335 Harmful to aquatic life with long lasting effects. H412 Precautionary statement(s) Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P261 P264 Wash skin thoroughly after handling. Avoid release to the environment. P273 P280 Wear protective gloves/ eye protection/ face protection. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal word Warning Hazard statement(s) H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P302 + P352 IF ON SKIN: Wash with plenty of water. Supplemental Hazard none

DISCLAIMER

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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. Lachrymator.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula	: C12H22O2
Molecular weight	: 198,30 g/mol
CAS-No.	: 688-84-6
EC-No.	: 211-708-6

Component	Classification	Concentration
2-Ethylhexyl methacrylate		
CAS-No. 688-84-6	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1;	<= 100 %
EC-No. 211-708-6	STOT SE 3; Aquatic Chronic 3; H315,	
	H319, H317, H335, H412 Concentration	
	limits: >= 10 %: STOT SE 3, H335;	

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.
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.
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
Remove container from danger zone and cool with water. Prevent fire extinguishing water

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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. Keep away from heat and sources of ignition. 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 Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Light sensitive. Heat sensitive. 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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Butoject® (KCL 898) 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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber

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Minimum layer thickness: 0,4 mm Break through time: 120 min Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M) Body Protection protective clothing Respiratory protection Recommended Filter type: Filter A-(P2) 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 b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH I) Viscosity m) Water solubility n) Partition coefficient: n-octanol/water bioaccumulation o) Vapor pressure p) Density Relative density g) Relative vapor density

density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information Relative vapor density

clear, liquid colorless ester-like Melting point/range: < -50 °C - OECD Test Guideline 102

120 °C at 24 hPa - lit.

No data available

No data available

92 °C - closed cup 250 °C at 1.010 - 1.013 hPa No data available

No data available Viscosity, kinematic: 2,12 mm2/s at 20 °C Viscosity, dynamic: No data available 0,0031 g/l at 20 °C - OECD Test Guideline 105 log Pow: 4,95 at 20 °C - OECD Test Guideline 107 - Potential

ca.0,065 hPa at 20 °C - OECD Test Guideline 104 0,885 g/mL at 25 °C - lit. 0,88 at 20 °C - DIN 51757 7,94

No data available

No data available none

7,94

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).
Contains the following stabilizer(s):
hydroquinone monomethyl ether (0,005 %)
10.3 Possibility of hazardous reactions

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Violent reactions possible with: Oxidizing agents Strong acids alkalines peroxi compounds polymerisation initiators 10.4 Conditions to avoid Strong heating. 10.5 Incompatible materials Strong oxidizing agents 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 other Toxic 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 semi-static test LC50 - Oryzias latipes - 2,78 mg/l - 96 h (OECD Test Guideline 203) Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata - 7,86 mg/l - 72 h (OECD Test Guideline 201) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d Result: 88 % - Readily biodegradable. (OECD Test Guideline 301C) 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: : The substance/mixture does not contain components Assessment 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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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SECTION 14: Transport information

14.1 UN number					
ADR/RID: -		IMDG: -	IATA: 3334		
14.2 UN proper shipping name					
ADR/RID	: Not dangerous goods				
IMDG	: Not dangerous goods				
IATA	: Aviation regulated liquid, n.o.s. (2-Ethylhexyl methacrylate)				
14.3 Transport hazard class(es)					
ADR/RID: -		IMDG: -	IATA: 9		
14.4 Packaging gro	pup				
ADR/RID: -		IMDG: -	IATA: III		
14.5 Environmental hazards					
ADR/RID: no		IMDG Marine pollutant: no	IATA: no		
14.6 Special preca	utions for user				
No data available					

SECTION 15: Regulatory information

15.1 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.
Other regulations
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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