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: Methyl acrylate, 99% Product Code: M 1915 CAS No : 96-33-3

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 info@ottokemi.com

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 H225: Highly flammable liquid and vapor. Flammable liquids, (Category 2) H302: Harmful if swallowed. Acute toxicity, (Category 4) Acute toxicity, (Category 3) H331: Toxic if inhaled. Acute toxicity, (Category 4) Skin irritation, (Category 2) H312: Harmful in contact with skin. H315: Causes skin irritation. Eve irritation, (Category 2) H319: Causes serious eye irritation. Skin sensitization, (Category 1) H317: May cause an allergic skin reaction. Specific target organ toxicity -H335: May cause respiratory irritation. single exposure, (Category 3), Respiratory system Long-term (chronic) aquatic H412: Harmful to aquatic life with long hazard, (Category 3) lasting effects. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard Statements H225 Highly flammable liquid and vapor. H302 + H312 Harmful if swallowed or in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H331 Toxic if inhaled. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects. **Precautionary Statements** Keep away from heat, hot surfaces, sparks, open flames and P210 other ignition sources. No smoking. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel P301 + P312 unwell. IF ON SKIN (or hair): Take off immediately all contaminated P303 + P361 + P353 clothing. Rinse skin with water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. Supplemental Hazard none

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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>

Statements Reduced Labeling (<= 125 ml) Pictogram				
Signal Word	Danger			
Hazard Statements	24			
H331	Toxic if inhaled.			
H317	May cause an allergic s	kin reaction.		
H412	Harmful to aquatic life w	ith long lasting effects.		
Precautionary Statements				
P304 + P340 + P311		erson to fresh air and keep comfortable		
Or works and a block and	for breathing. Call a PO	ISON CENTER/ doctor.		
Supplemental Hazard Statements	none			
2.3 Other hazards				
This substance/mixture contains no compo	nents considered to be either persistent			
bioaccumulative and toxic (PBT), or very pe		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				
(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.				
Lachrymator.				
SECTION 3: Composition/information or	n ingredients			
3.1 Substances				
Formula : C4H6O2				
Molecular weight : 86,09 g/mol		State State		
CAS-No. : 96-33-3				
EC-No. : 202-500-6				
Component	Classification	Concentration		
methyl acrylate				

Classification	Concentration
Flam. Liq. 2; Acute Tox. 4; Acute Tox. 3;	<= 100 %
Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin	
Sens. 1; STOT SE 3; Aquatic Chronic 3;	
H225, H302, H331, H312, H315, H319,	
H317, H335, H412	
	Flam. Liq. 2; Acute Tox. 4; Acute Tox. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; STOT SE 3; Aquatic Chronic 3; H225, H302, H331, H312, H315, H319,

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
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled
After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.
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.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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 : info@ottokemi.com Web : www.ottokemi.com

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 Drv 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. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. 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 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. Risk of explosion. 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 carefully 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 safe handling Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. 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

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage stabilityRecommended storage temperature

2 - 8 °C Light sensitive.

Storage class

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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>

Storage class (TRGS 510): 3: Flammable 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 Eve/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: 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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,4 mm Break through time: 30 min Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M) **Body Protection** Flame retardant antistatic 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. Risk of explosion. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state clear, liquid b) Color colorless c) Odor pungent Melting point/ range: -75 °C - lit. d) Melting point/freezing point e) Initial boiling point 80 °C - lit. and boiling range f) Flammability (solid, No data available gas) g) Upper/lower Upper explosion limit: 25 %(V) flammability or Lower explosion limit: 2,8 %(V) explosive limits h) Flash point -2,8 °C - closed cup i) Autoignition 468 °C temperature at 1.013,25 hPa

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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>

j) Decomposition temperature k) pH

I) Viscosity

m) Water solubilityn) Partition coefficient:n-octanol/watero) Vapor pressure

p) Density
Relative density
q) Relative vapor
density
r) Particle
characteristics
s) Explosive properties
t) Oxidizing properties
9.2 Other safety information
Surface tension
Relative vapor
density

SECTION 10: Stability and reactivity

10.1 Reactivity Vapors may form explosive mixture with air. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) 10.3 Possibility of hazardous reactions Risk of explosion with: Peroxides Strong oxidizing agents Strong acids strong alkalis Activated charcoal 10.4 Conditions to avoid Heat. May polymerize on exposure to light. Warming. 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 - Oncorhynchus mykiss (rainbow trout) - 3,4 mg/l - 96 h (OECD Test Guideline 203)

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

No data available

at 20 °C neutral Viscosity, kinematic: 10 mm2/s at 23 °C Viscosity, dynamic: 0,472 mPa.s at 25 °C ca.60 g/l at 20 °C log Pow: 0,74 at 25 °C - Bioaccumulation is not expected.

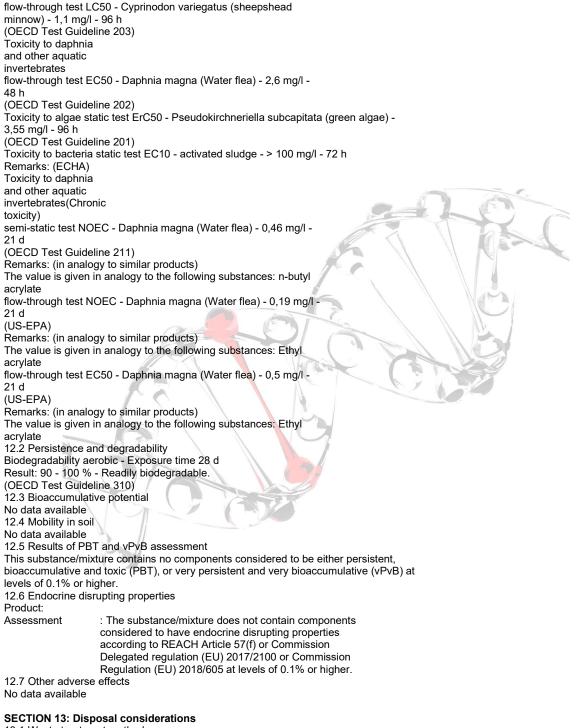
90 hPa at 20,2 °C 150 hPa at 30,8 °C 0,956 g/cm3 at 25 °C - lit. 0,95 at 20 °C 2,97 - (Air = 1.0)

No data available

No data available none

24,2 mN/m at 20 °C 2,97 - (Air = 1.0)

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>



13.1 Waste treatment methods

No data available

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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>

SECTION 14: Transport information

14.1 UN number					
ADR/RID: 1919	IMDG: 1919	IATA: 1919			
14.2 UN proper shipping name					
ADR/RID : METHYL ACRYLATE, STABILIZED					
IMDG : METHYL ACRYLATE, STABILIZED					
IATA : Methyl acrylate, stabilized					
14.3 Transport hazard class(es)					
ADR/RID: 3	IMDG: 3	IATA: 3			
14.4 Packaging group ADR/RID: II	IMDG: II	IATA: II			
14.5 Environmental hazards	IMDG. II	IATA. II			
ADR/RID: no	IMDG Marine pollutant: no	IATA: no			
14.6 Special precautions for user					
Tunnel restriction code : (D/E)					
Further information : No data available					
14.7 Maritime transport in bulk according to IMO instrument					
Not applicable for product as supplied.					
SECTION 15: Regulatory information		1			
15.1 Safety, health and environmental regulations/legislatio	n specific for the				
substance or mixture					
This material safety data sheet complies with the requireme	ents of Regulation (EC) No.				
1907/2006.					
National legislation					
Seveso III: Directive 2012/18/EU of the					
European Parliament and of the Council					
on the control of major-accident hazards					
involving dangerous substances.					
H2 ACUTE TOXIC					
P5c FLAMMABLE LIQUIDS					
46 Methyl acrylate					
Other regulations					
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or					
stricter national regulations where applicable.	a at work				
Take note of Dir 94/33/EC on the protection of young peopl 15.2 Chemical Safety Assessment	e at work.				
For this product a chemical safety assessment was not carried out					
r of the product a chemical subcy assessment was not carried out					
SECTION 16: Other Information	- the				
This safety data short should be used in conjunction with to	appied shoots. It does not replace them. The inferr	motion aivon is			

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.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product