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-Methoxy propene, 97% Product Code: M 1889 CAS No : 116-11-0

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 Flammable liquids (Category 1), H224 Acute toxicity, Oral (Category 4), H302 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 Danger Hazard statement(s) H224 H302 Precautionary statement(s) P210 P233

P240 P241 P301 + P312

P403 + P235 Supplemental Hazard information (EU) EUH019 Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard statement(s) H224 Precautionary statement(s) P210 P233 P240

P240 P241 P403 + P235 Supplemental Hazard information (EU) EUH019 2.3 Other hazards Extremely flammable liquid and vapor. Harmful if swallowed.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

Store in a well-ventilated place. Keep cool.

May form explosive peroxides.

Danger

Extremely flammable liquid and vapor.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Store in a well-ventilated place. Keep cool.

May form explosive peroxides.

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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.

SECTION 3: Composition/information on ingredients

3.1 Substances		
Synonyms	: Isopropenyl methyl ether	
Formula	: C4H8O	
Molecular weight	: 72,11 g/mol	
CAS-No.	: 116-11-0	
EC-No.	: 204-125-3	

Component	Classification	Concentration
isopropenyl methyl ether		
CAS-No. 116-11-0	Flam. Liq. 1; Acute Tox. 4; H224, H302	<= 100 %
EC-No. 204-125-3		

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. In case of eye contact After eye contact: rinse out with plenty of water. 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 Foam Carbon dioxide (CO2) 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. 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 In the event of fire, wear self-contained breathing apparatus. 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.

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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 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 Change contaminated clothing. Preventive skin protection recommended. Wash hands 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. Storage stability Recommended storage temperature 2 - 8 °C Light sensitive. Store under inert gas. Test for peroxide formation periodically and before distillation. Storage class 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 Eye/face protection Use equipment for eve 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: Viton® Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested: Vitoject® (KCL 890 / Aldrich Z677698, 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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

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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 required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type AX 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 b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Úpper/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 o) Vapor pressure p) Density Relative density g) Relative vapor density r) Particle *c*haracteristics

s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available

liquid colorless No data available < 25 °C

34 - 36 °C - lit.

No data available

No data available

-29 °C - closed cup - DIN 51755 Part 1 No data available

No data available

ca.7,0

Viscosity, kinematic: No data available Viscosity, dynamic: No data available No data available log Pow: 1,7 at 21 °C - Bioaccumulation is not expected.

1.500 hPa at 50 °C 0,753 g/cm3 at 25 °C - lit. No data available No data available

No data available

No data available none

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SECTION 10: Stability and reactivity

10.1 Reactivity Formation of peroxides possible. Vapors may form explosive mixture with air. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature). Contains the following stabilizer(s): Potassium carbonate (0,5 %) 10.3 Possibility of hazardous reactions Violent reactions possible with: acids 10.4 Conditions to avoid Light. Warming. Moisture 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products Peroxides 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.
 Special Remarks on other Toxic Effects on Humans: Not available.
 Special Remarks on other Toxic Effects on Humans: Not available.
 Special Remarks on the Toxic Effects on Humans: Not available.

(OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates flow-through test EC50 - Daphnia magna (Water flea) - 37 mg/l - 48 (ISO 6341) Toxicity to algae static test NOEC - Pseudokirchneriella subcapitata (green algae) - 45 mg/l - 72 h (OECD Test Guideline 201) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d Result: 20 % - Not readily biodegradable. (OECD Test Guideline 301D) 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[.]

Product:

Assessment : The substance/mixture does not contain components

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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. **SECTION 14: Transport information** 14.1 UN number ADR/RID: 1993 IMDG: 1993 14.2 UN proper shipping name ADR/RID : FLAMMABLE LIQUID, N.O.S. (isopropenyl methyl ether) IMDG : FLAMMABLE LIQUID, N.O.S. (isopropenyl methyl ether) ΙΑΤΑ : Flammable liquid, n.o.s. (isopropenyl methyl ether) 14.3 Transport hazard class(es) ADR/RID: 3 IMDG: 3 14.4 Packaging group ADR/RID: I IMDG: I 14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no 14.6 Special precautions for user : (D/E) Tunnel restriction code

IATA: 3

IATA: 1993

IATA: I IATA: no

SECTION 15: Regulatory information

Further 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. 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. : FLAMMABLE LIQUIDS 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.

: No data available

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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