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

### **MATERIAL SAFETY DATA SHEET (MSDS)**

**SECTION 1. Product identifiers** 

Product name: Isobutyl methacrylate, 99%

Product Code: I 1570 CAS No: 97-86-9

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

Flammable liquids, (Category 3) Skin irritation, (Category 2) Skin sensitization, (Category 1)

Specific target organ toxicity - single exposure, (Category 3),

Respiratory system 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word

Hazard Statements

H226 H315 H317

H335

**Precautionary Statements** 

P210

P233 P240 P241 P280

P303 + P361 + P353

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml)

Pictogram Signal Word

Hazard Statements

H317

**Precautionary Statements** Supplemental Hazard

Statements 2.3 Other hazards H226: Flammable liquid and vapor.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

Warning

Flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

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. Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

none

Warning

May cause an allergic skin reaction.

none none

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

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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

Formula : C8H14O2 Molecular weight : 142,20 g/mol CAS-No. : 97-86-9 EC-No. : 202-613-0

Component	Classification	Concentration
isobutyl methacrylate		
CAS-No. 97-86-9	Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1;	<= 100 %
EC-No. 202-613-0	STOT SE 3; H226, H315, H317, H335 M-	
	Factor - Aquatic Acute: 1	

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. 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.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

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

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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 with liquid-absorbent material (e.g. Chemizorb ${\bf @}$  ).

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

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Storage stabilityRecommended storage temperature

2 - 8 °C

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

Skin protection

required

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 ABEK

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.

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### **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

o) 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

clear, liquid colorless ester-like

Melting point/freezing point: ca.-35 °C at 1.025 hPa

155 °C - lit.

No data available

Upper explosion limit: ca.8,0 %(V) at 1013 hPa Lower explosion limit: ca.2,0 %(V) at 1013 hPa

42,5 °C - closed cup

385 °C

at 1.013 hPa

No data available

No data available

Viscosity, kinematic: 1,01 mm2/s at 20 °C

Viscosity, dynamic: 0,9 mPa.s at 20 °C

ca.0,6 g/l at 20 °C

log Pow: 2,95 at 20 °C - OECD Test Guideline 107

2,11 hPa at 20 °C - OECD Test Guideline 104

0,886 g/mL at 25 °C - lit.

No data available

No data available

No data available

No data available

none

23,5 mN/m at 24 °C

### **SECTION 10: Stability and reactivity**

10.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Contains the following stabilizer(s):

hydroquinone (0,01 %)

10.3 Possibility of hazardous reactions

Polymerization occurs when exposed to white light, ultraviolet light or heat.

10.4 Conditions to avoid

Heat.

Heating.

10.5 Incompatible materials

Oxidizing agents, Strong acids and strong bases

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).

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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) - 20,0

mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

flow-through test EC50 - Daphnia magna (Water flea) - > 29 mg/l -

48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata - 16 mg/l - 72 h

(OECD Test Guideline 201)

static test NOEC - Pseudokirchneriella subcapitata - 5,8 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to daphnia

and other aquatic

invertebrates (Chronic

semi-static test NOEC - Daphnia magna (Water flea) - 1,1 mg/l - 21

(OECD Test Guideline 211)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 74,3 % - Readily biodegradable.

(OECD Test Guideline 301D)

Biochemical Oxygen Demand (BOD)

600 mg/l

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

### **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: 2283 IMDG: 2283 IATA: 2283

14.2 UN proper shipping name

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ADR/RID : ISOBUTYL METHACRYLATE, STABILIZED IMDG : ISOBUTYL METHACRYLATE, STABILIZED

IATA : Isobutyl methacrylate, stabilized

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards
ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user Tunnel restriction code : (D/E)

Further information : 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.

Authorisations and/or restrictions on use

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.

P5c FLAMMABLE LIQUIDS

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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