

# Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company  
Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,  
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)  
Tel : + 91 98200 41841 Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Product identifiers

Product Name : Butyl methacrylate, puriss, 99%+  
Product Code : B 2412  
CAS No: 97-88-1

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  
No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,  
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no. : + 91 98200 41841 (10 : 00 am – 06 : 00 pm)

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flammable liquids, (Category 3) H226: Flammable liquid and vapor.  
Skin irritation, (Category 2) H315: Causes skin irritation.  
Eye 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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Warning

Hazard Statements

H226

Flammable liquid and vapor.

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary Statements

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233

Keep container tightly closed.

P240

Ground and bond container and receiving equipment.

P280

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

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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 Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Warning

Hazard Statements

H317

May cause an allergic skin reaction.

Precautionary Statements

none

Supplemental Hazard

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Statements none

## 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

Formula : C<sub>8</sub>H<sub>14</sub>O<sub>2</sub>  
Molecular weight : 142,2 g/mol  
CAS-No. : 97-88-1  
EC-No. : 202-615-1

Component	Classification	Concentration
tert-Butylmagnesium chloride		
CAS-No EC-No	677-22-5 211-638-6	Pyr. Liq. 1; Water-react 1; Skin Corr. 1B; Eye Dam. 1; H250, H260, H314, H318 >= 20 - < 30 %

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 (CO<sub>2</sub>) 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 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  
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®). 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.  
Recommended storage temperature see product label.  
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  
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](http://www.kcl.de)).  
Splash contact  
Material: butyl-rubber  
Minimum layer thickness: 0,7 mm  
Break through time: 60 min

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Material tested: Butoject® (KCL 898)

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

Recommended Filter type: Filter A-(P2)

The entrepreneur 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	liquid
b) Color	colorless
c) Odor	No data available
d) Melting point/freezing point	Melting point/ range: -75 °C
e) Initial boiling point and boiling range	162 - 165 °C at 1.013 hPa
f) Flammability (solid, gas)	No data available
g) Upper/lower flammability or explosive limits	Upper explosion limit: 8 %(V) Lower explosion limit: 2 %(V)
h) Flash point	48,5 °C - closed cup - Regulation (EC) No. 440/2008, Annex, A.9
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	No data available
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: 1,1 mPa.s at 20 °C
m) Water solubility	ca.0,2 g/l
n) Partition coefficient: n-octanol/water	log Pow: 3,01
o) Vapor pressure	3 hPa at 20 °C
p) Density	0,896 g/cm <sup>3</sup>
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

9.2 Other safety information

Surface tension 30 mN/m at 20 °C

Relative vapor

density

4,91 - (Air = 1.0)

## 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 monomethyl ether (0,01 %)

10.3 Possibility of hazardous reactions

No data available

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10.4 Conditions to avoid

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 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 LC50 - *Oryzias latipes* (Orange-red killifish) - 5,57 mg/l - 96 h (nbutyl methacrylate)  
(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - *Daphnia magna* (Water flea) - 32 mg/l - 48 h (n-butyl methacrylate)

Toxicity to algae EC50 - *Pseudokirchneriella subcapitata* (green algae) - 57 mg/l - 96 h (n-butyl methacrylate)

12.2 Persistence and degradability

Biodegradability Result: 88 % - Readily biodegradable.

(OECD Test Guideline 301C)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available (n-butyl methacrylate)

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

Avoid release to the environment.

No data available

## SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

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