

# OTTO CHEMIE PVT LTD

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-----ISO 9001: 2015-----

## MATERIAL SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers  
Methyl acrylate, 99%  
Code M 1915

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 4), H312  
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

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

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 statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated 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

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal word Danger

Hazard statement(s)

H331 Toxic if inhaled.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.

Supplemental Hazard

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.  
Lachrymator.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Formula : C<sub>4</sub>H<sub>6</sub>O<sub>2</sub>

Molecular weight : 86,09 g/mol

CAS-No. : 96-33-3

EC-No. : 202-500-6

Index-No. : 607-034-00-0

Component

methyl acrylate

CAS-No. 96-33-3

EC-No. 202-500-6

Index-No.607-034-00-0

Classification

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, H317, H335,

H412

Concentration

<= 100 %

### 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.

#### 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.

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 stability

Recommended storage temperature

2 - 8 °C

Light sensitive.

### 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](http://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](http://www.kcl.de)).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: 30 min

Material tested: Camatri® (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 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) Appearance	Form: clear, liquid Color: colorless
b) Odor	pungent
c) Odor Threshold	No data available
d) pH	at 20 °C neutral
e) Melting point/freezing point	Melting point/range: -75 °C - lit.
f) Initial boiling point and boiling range	80 °C - lit.
g) Flash point	-2,8 °C - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 25 %(V) Lower explosion limit: 2,8 %(V)
k) Vapor pressure	90 hPa at 20,2 °C 150 hPa at 30,8 °C
l) Vapor density	2,97 - (Air = 1.0)
m) Relative density	0,95 at 20 °C
n) Water solubility	ca.60 g/l at 20 °C
o) Partition coefficient: n-octanol/water	log Pow: 0,74 at 25 °C - Bioaccumulation is not expected.
p) Autoignition temperature	468 °C at 1.013,25 hPa
q) Decomposition temperature	No data available
r) Viscosity	Viscosity, kinematic: 10 mm <sup>2</sup> /s at 23 °C Viscosity, dynamic: 0,472 mPa.s at 25 °C
s) Explosive properties	No data available
t) Oxidizing properties	No data available

### 9.2 Other safety information

Surface tension	24,2 mN/m at 20 °C
Relative vapor density	2,97 - (Air = 1.0)

## 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

Acute toxicity

No data available

LD50 Oral - Rat - male - 768 mg/kg

(OECD Test Guideline 401)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and

gastrointestinal tract.  
Acute toxicity estimate Inhalation - 4 h - 3 mg/l  
(Calculation method)  
Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of  
respiratory tractLC50 Inhalation - Rat - male and female - 4 h - < 10,8 mg/l  
(OECD Test Guideline 403)  
Acute toxicity estimate Dermal - 1.251 mg/kg  
(Calculation method)  
LD50 Dermal - Rabbit - 1.250 mg/kg  
Remarks: (ECHA)  
Skin corrosion/irritation  
Skin - Rabbit  
Result: irritating - 4 h  
(OECD Test Guideline 404)  
Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: Eye irritation  
Remarks: (IUCLID)  
Respiratory or skin sensitization  
Local lymph node assay (LLNA) - Mouse  
Result: positive  
(OECD Test Guideline 429)  
Germ cell mutagenicity  
Test Type: Ames test  
Result: Not mutagenic in Ames Test.  
Remarks: (IUCLID)  
Test Type: Micronucleus test  
Species: Mouse  
Cell type: Bone marrow  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: (ECHA)  
Carcinogenicity  
No data available  
Reproductive toxicity  
No data available  
Specific target organ toxicity - single exposure  
Inhalation - May cause respiratory irritation.  
Specific target organ toxicity - repeated exposure  
No data available  
Aspiration hazard  
No data available  
11.2 Additional Information  
Repeated dose toxicity - Rat - male and female - Oral - 90 d - NOAEL (No observed adverse  
effect level) - 5 mg/kg - LOAEL (Lowest observed adverse effect level) - 20  
mg/kgRemarks:  
Subchronic toxicity  
RTECS: AT2800000  
Cough, Shortness of breath, Headache, Nausea, Vomiting, prolonged or repeated exposure  
can cause:, Lung irritation  
To the best of our knowledge, the chemical, physical, and toxicological properties have not  
been thoroughly investigated.  
Possible symptoms:  
After absorption:  
CNS disorders  
Headache  
Vomiting  
somnolence  
Damage to:  
Liver  
Lungs  
Other dangerous properties can not be excluded.  
Handle in accordance with good industrial hygiene and safety practice.

## 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)  
flow-through test LC50 - *Cyprinodon variegatus* (sheepshead

minnow) - 1,1 mg/l - 96 h  
(OECD Test Guideline 203)  
Toxicity to daphnia  
and other aquatic  
invertebrates  
flow-through test EC50 - Daphnia magna (Water flea) - 2,6 mg/l -  
48 h  
(OECD Test Guideline 202)  
Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) -  
3,55 mg/l - 96 h  
(OECD Test Guideline 201)  
Toxicity to bacteria static test EC10 - activated sludge - > 100 mg/l - 72 h  
Remarks: (ECHA)  
12.2 Persistence and degradability  
Biodegradability aerobic - Exposure time 28 d  
Result: 90 - 100 % - Readily biodegradable.  
(OECD Test Guideline 310)  
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 Other adverse effects  
No data available

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods  
Product  
See [www.retrologistik.com](http://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: 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  
ADR/RID: no IMDG Marine pollutant: no IATA: no  
14.6 Special precautions 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.  
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.  
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.  
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.

