# OTTO CHEMIE PVT LTD

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

#### MATERIAL SAFETY DATA SHEET

## **SECTION 1 Product identifiers**

Product name: Methane sulphonyl chloride, 99%+

Product Number: M 1825 CAS-No.: 124-63-0

# **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 1), H330 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318 Skin sensitization (Category 1), H317

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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)

H290 May be corrosive to metals.

H301 + H311 Toxic if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. May cause an allergic skin reaction. H317

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

Precautionary statement(s)

Keep only in original packaging. P234 Do not breathe mist or vapors. P260

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

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

clothing. Rinse skin with water.

IF INHALED: Remove person to fresh air and keep comfortable P304 + P340 + P310

for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing. none

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml) Pictogram

Signal Word

P305 + P351 + P338

Danger

Hazard statement(s)

H330 Fatal if inhaled.

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H301 + H311 Toxic if swallowed or in contact with skin.

Precautionary statement(s)

Do not breathe mist or vapors. P260

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

protection.

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

clothing. Rinse skin with water.

IF INHALED: Remove person to fresh air and keep comfortable P304 + P340 + P310

for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes.

P305 + P351 + P338 Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

none

Statements

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.

## **SECTION 3: Composition/information on ingredients**

3.1 Substances

Molecular weight: 114,55 g/mol CAS-No.: 124-63-0 EC-No.: 204-706-1

Component	Classification	Concentration
methanesulphonic acid chloride		
CAS-No. 124-63-0	Met. Corr. 1; Acute Tox. 3;	<= 100 %
EC-No. 204-706-1	Acute Tox. 1; Acute Tox.	
	3; Skin Corr. 1B; Eye	
	Dam. 1; Skin Sens. 1;	
	STOT SE 3; H290, H301,	
	H330, H311, H314, H318,	
	H317, H335	

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. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

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 Dry powder

Unsuitable extinguishing media

Water

5.2 Special hazards arising from the substance or mixture

Sulfur oxides

Hydrogen chloride gas

Combustible.

Fire may cause evolution of:

Hydrogen chloride gas, Sulfur oxides

Caution! in contact with water product releases:

Organic acids

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

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

Suppress (knock down) gases/vapors/mists with a water spray jet. 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. 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.

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.

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

No metal containers. No metal containers.

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic

hazardous materials

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). Tightly fitting safety goggles

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: butyl-rubber

Minimum layer thickness: 0,7 mm Break through time: 480 min

Material tested:Butoject® (KCL 898)
This recommendation applies only to the

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).

Splash contact

Material: Chloroprene

Minimum layer thickness: 0,65 mm Break through time: 120 min Material tested:KCL 720 Camapren®

**Body Protection** 

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.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Physical state liquid b) Color yellow c) Odor stinging

Melting point: -32 °C d) Melting

point/freezing point

e) Initial boiling point 53 - 55 °C at 11 hPa

and boiling range

f) Flammability (solid. No data available

gas)

g) Upper/lower No data available

flammability or explosive limits

h) Flash point 113 °C - closed cup i) Autoignition 435 - 436 °C temperature at 1.022 hPa j) Decomposition No data available

temperature

k) pH No data available

I) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: 0,002 mPa.s at 25 °C m) Water solubility at 20 °C insoluble, (slow decomposition)

n) Partition coefficient: Not applicable

n-octanol/water

12 hPa at 53 °C o) Vapor pressure p) Density 1,474 g/cm3 No data available Relative density q) Relative vapor No data available density

r) Particle No data available characteristics

s) Explosive properties No data available

t) Oxidizing properties none 9.2 Other safety information

2,5 mN/m at 21 °C Surface tension 7

- Surface tension

3,9 Relative vapor

Density

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

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong bases

Strong oxidizing agents

Alcohols

10.4 Conditions to avoid

Strong heating.

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

LD50 Oral - Rat - 175 mg/kg (OECD Test Guideline 401)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the esophagus and the stomach. LC50 Inhalation - Rat - 4 h - 0,117 mg/l - vapor

(OECD Test Guideline 403)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of

respiratory tract, Lung edema, Symptoms may be delayed.

LD50 Dermal - Rabbit - > 200 - 2.000 mg/kg

Remarks: (ECHA) Skin corrosion/irritation Skin - Rabbit

Result: Severe irritations

Result: Severe irritations Remarks: (RTECS)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes burns. Remarks: (IUCLID)

Causes serious eye damage. Lacrimal irritation due to vapours.

Eyes - Rabbit

Result: Severe eve irritation

(Draize Test)

Respiratory or skin sensitization Maximization Test - Guinea pig

Result: positive Remarks: (ECHA) Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: Human lymphocytes

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: positive Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: positive

Test Type: Micronucleus test

Species: Mouse Cell type: Bone marrow

Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative Carcinogenicity No data available Reproductive toxicity No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available Aspiration hazard No data available

11.2 Additional Information

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.

After absorption:

Nausea Vomiting Dizziness Headache



gastric pain

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

# **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 11 mg/l -

96 h

Remarks: neutral

(IUCLID)

Toxicity to daphnia and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - 34 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 32

mg/l - 72 h

(OECD Test Guideline 201)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 90,6 % - 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:

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

Biological effects:

Harmful effect due to pH shift.

After hydrolysis acid effect on fish and plankton.

Discharge into the environment must be avoided.

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: 3246 IMDG: 3246 IATA: 3246

14.2 UN proper shipping name

ADR/RID: METHANESULPHONYL CHLORIDE IMDG: METHANESULPHONYL CHLORIDE

IATA: Methanesulphonyl chloride Passenger Aircraft: Not permitted for transport Cargo Aircraft: Not permitted for transport

14.3 Transport hazard class(es)

ADR/RID: 6.1 (8) IMDG: 6.1 (8) IATA: 6.1 (8)

14.4 Packaging group

ADR/RID: I IMDG: I IATA: 
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.

: ACUTE TOXIC

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.

