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Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

Product Identifier

Perihalan Produk:
Product Description:

Benzyl chloromethyl ether
Benzyl chloromethyl ether

Cat No.: 376950500; 376952500; 376950000; 376950100

Synonyms Benzyloxymethyl chloride

CAS No 3587-60-8 Molecular Formula C8 H9 CI O

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.
Uses advised against No Information available

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### **SECTION 2: HAZARDS IDENTIFICATION**

#### Classification of the substance or mixture

| Acute oral toxicity                                | Category 4 (H302)  |
|--|--------------------|
| Acute dermal toxicity                              | Category 4 (H312)  |
| Acute Inhalation Toxicity - Dusts and Mists        | Category 4 (H332)  |
| Skin Corrosion/Irritation                          | Category 2 (H315)  |
| Serious Eye Damage/Eye Irritation                  | Category 2 (H319)  |
| Carcinogenicity                                    | Category 1A (H350) |
| Specific target organ toxicity - (single exposure) | Category 3 (H335)  |

### Label Elements



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#### Signal Word

#### Danger

#### **Hazard Statements**

H319 - Causes serious eye irritation

H315 - Causes skin irritation

H350 - May cause cancer

H335 - May cause respiratory irritation

H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled

#### **Precautionary Statements**

#### Prevention

P202 - Do not handle until all safety precautions have been read and understood

P201 - Obtain special instructions before use

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection/ face protection

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P284 - In case of inadequate ventilation wear respiratory protection

#### Response

P312 - Call a POISON CENTER or doctor if you feel unwell

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P330 - Rinse mouth

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Other Hazards

Combustible liquid

This product does not contain any known or suspected endocrine disruptors

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

| Component                         | CAS No    | Weight % |
|-----------------------------------|-----------|----------|
| Benzene, [(chloromethoxy)methyl]- | 3587-60-8 | 100      |

#### **SECTION 4: FIRST AID MEASURES**

#### Description of first aid measures

**Eve Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated

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clothes and shoes. Get medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Difficulty in breathing. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Symptoms may be delayed.

### **SECTION 5: FIREFIGHTING MEASURES**

#### **Extinguishing media**

#### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.

#### Extinguishing media which must not be used for safety reasons

No information available.

### Special hazards arising from the substance or mixture

Combustible material. Flammable. Containers may explode when heated.

### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas.

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### Personal Precautions, Protective Equipment and Emergency Procedures

Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental precautions**

See Section 12 for additional Ecological Information.

#### Methods and Material for Containment and Cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition.

#### Reference to Other Sections

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Refer to protective measures listed in Sections 8 and 13.

#### **SECTION 7: HANDLING AND STORAGE**

#### Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Handle product only in closed system or provide appropriate exhaust ventilation. Keep away from open flames, hot surfaces and sources of ignition.

#### Conditions for Safe Storage, Including any Incompatibilities

Keep in a dry place. Keep container tightly closed. Keep away from heat, sparks and flame. Keep refrigerated. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### Specific End Uses

Use in laboratories.

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### Control Parameters

#### **Exposure Controls**

#### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

Eye Protection Goggles

Hand Protection Protective gloves

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure

#### Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators

**Recommended Filter type:** Organic gases and vapours filter Type A Brown conforming to EN14387

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

When RPE is used a face piece Fit Test should be conducted

Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** No information available

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### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Liquid

(Air = 1.0)

explosive air/vapour mixtures possible

Information on basic physical and chemical properties

**Appearance** Clear Physical State Liquid Odor Stench

**Odor Threshold** No data available рH No information available

Melting Point/Range No data available **Softening Point** No data available

**Boiling Point/Range** 102 °C / 215.6 °F @ 14 mmHg

Flash Point 91 °C / 195.8 °F Method - No information available

No data available **Evaporation Rate** Flammability (solid,gas) Not applicable

**Explosion Limits** No data available

**Vapor Pressure** No data available **Vapor Density** No data available

Specific Gravity / Density 1.130

Not applicable **Bulk Density** Liquid

Water Solubility No information available No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

No data available **Autoignition Temperature** No data available **Decomposition Temperature** No data available

**Viscosity** 

**Explosive Properties** 

**Oxidizing Properties** No information available

Molecular Formula C8 H9 CI O **Molecular Weight** 156.61

### **SECTION 10: STABILITY AND REACTIVITY**

Reactivity

None known, based on information available.

**Chemical Stability** 

Stable under normal conditions.

Possibility of Hazardous Reactions

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Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions No information available.

**Conditions to Avoid** 

Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

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Incompatible Materials

Strong oxidizing agents. Strong bases. Metals.

**Hazardous Decomposition Products** 

Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride gas.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

### Information on Toxicological Effects

#### **Product Information**

(a) acute toxicity;

OralCategory 4DermalCategory 4InhalationCategory 4

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; Category 1A

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

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Other Adverse Effects The toxicological properties have not been fully investigated.

delayed

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

### **SECTION 12: ECOLOGICAL INFORMATION**

Contains no substances known to be hazardous to the environment or that are not **Ecotoxicity effects** 

degradable in waste water treatment plants.

No information available Persistence and degradability

Bioaccumulative potential No information available

No information available. Mobility in soil

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

Other adverse effects No information available

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous Dispose of in accordance with the European Directives on

waste and hazardous waste Dispose of in accordance with local regulations

Dispose of this container to hazardous or special waste collection point. **Contaminated Packaging** 

Other Information Waste codes should be assigned by the user based on the application for which the product

was used Do not empty into drains

### **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO

UN-No UN2810 **Hazard Class** 6.1 **Packing Group** 

**Proper Shipping Name** Toxic liquid, organic, n.o.s.

Road and Rail Transport

**UN-No** UN2810 **Hazard Class** 6.1 **Packing Group** 

**Proper Shipping Name** Toxic liquid, organic, n.o.s.

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IATA

UN-No UN2810 **Hazard Class** 6.1 **Packing Group** 

**Proper Shipping Name** TOXIC LIQUID, ORGANIC, N.O.S.\*

**Special Precautions for User** No special precautions required

#### **SECTION 15: REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

X = listedInternational Inventories

| Component                | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | IECSC | AICS | KECL |
|--------------------------|--------|------|-----|-------|------|------|-------|------|------|
| Benzene,                 | -      | -    | -   | -     | -    | X    | -     | -    | -    |
| [(chloromethoxy)methyl]- |        |      |     |       |      |      |       |      |      |

#### **National Regulations**

**Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

### **SECTION 16: OTHER INFORMATION**

#### Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)

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EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

Inventory

Substances List **ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

#### **Disclaimer**

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**End of Safety Data Sheet**