

# Safety Data Sheet

Date of Issue: 6.10.2021 Date of Expiry: 6.10.2026

# 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : ECP Limited

Address : PO Box 34125, Birkenhead, Auckland 0746

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Emergency phone number : 0800 243 622 (24 hours)

Product Name	Chlorobenzene
Product Code	8023
CAS No.	108-90-7

**Recommended use** : Laboratory Investigations

#### 2: Hazard's identification

#### 2.1 GHS Classification

Flammable Liquids (Category C)

Acute toxicity, Oral (Category D)

Acute toxicity, Inhalation (Category D)

Aquatic toxicity (Acute or Chronic) (Category B)

#### 2.2 Label elements

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects







# Signal word: Warning Hazard statements

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# **Precautionary**

#### statements

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

P243 Take precautionary measures against static discharge.

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

P273 Avoid release to the environment.

P302+P352 IF ON SKIN: Wash with plenty of water/...

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

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...

P403+P235 Store in a well-ventilated place. Keep cool.

# 3: Composition/information on ingredients

#### 3.1 Substances

Substance name Chlorobenzene Molecular formula C6H5Cl Molecular weight 112.56 g/mol CAS No. 108-90-7

#### 4: First aid measures

#### 4.1 General information

**General Advice** If symptoms persist, call a physician.

**Eye 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 plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**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.

# **4.2 Most important symptoms and effects, both acute and delayed** no data available

# **4.3 Indication of any immediate medical attention and special treatment needed** no data available

## 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

#### 4.5 Information to physician

no data available

# 5: Firefighting measures

# 5.1. Extinguishing media Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

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

No information available

# 5.2. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Containers may explode when heated.

#### **Hazardous Combustion Products**

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

#### 5.3. Advice for firefighters

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

#### 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation.

# 6.2. Environmental precautions

Should not be released into the environment.

# 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. 6.4. Reference to other sections

# 7: Handling and storage

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene

# 7.2. Conditions for safe storage, including any incompatibilities

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

#### 7.3. Specific end use(s)

Use in laboratories

# 8: Exposure controls/personal protection

#### 8.1 Exposure controls

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

### **Eye/face protection**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

# **Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

# 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state : liquid Colour : colourless

(b) Odour : no data available (c) Odour threshold : no data available (d) pH : no data available

(e) Melting point/freezing point: : -45 °C (f) Initial boiling point and boiling range: 130 °C (1013 hPa) (g) Flash point : 28 °C

(h) Evaporation rate : no data available

(i) Flammability (solid, gas) : Flammable liquid and vapour.

(j) Flammability or explosive limits

Lower explosion limit : 1.3 % (v/v)Upper explosion limit : 7 % (v/v)

(k) Vapour pressure: 10 mmHg (22 °C)(l) Vapour density: 3.88 (20 °C)(m) Relative density: 1.11 g/cm³ (20 °C)

(n) Solubility(ies)

Water solubility (g/L) : 400 mg/l (20 °C)
Soluble (g/L) in Ethanol : no data available
(o) Partition coefficient: n-octanol/water : 2.89 (20 °C)

(p) Auto-ignition temperature : 590 °C

(q) Decomposition temperature : no data available

(r) Viscosity

Kinematic viscosity : no data available
Dynamic viscosity : 0.8 mPa\*s (20 °C)
(s) Explosive properties : not applicable
(t) Oxidising properties : not applicable

#### Other information

Bulk density : not applicable

Refraction index : 1.5248 (589 nm; 20 °C)

Dissociation constant : no data available Surface tension : no data available Henry constant : no data available

#### 10: Stability and reactivity

#### 10.1 Reactivity

no data available

## 10.2 Chemical stability

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

# 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

# 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

#### 10.7 Additional information

no data available

# 11: Toxicological information

# 11.1 Information on toxicological effects

### **Acute effects**

Acute oral toxicity:

LD50: > 1100 mg/kg - Rat - (IUCLID)

Acute dermal toxicity:

no data available

Acute inhalation toxicity:

LC50: 13.5 mg/l - Rat - (Japan GHS Basis for Classification Data)

# Irritant and corrosive effects

Primary irritation to the skin:

Causes skin irritation.

# Irritation to eyes:

not applicable

## **Irritation to respiratory tract:**

not applicable

## Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

## STOT-single exposure

not applicable

## STOT-repeated exposure

not applicable

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity

No indication of human carcinogenicity.

# Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

## Reproductive toxicity

No indications of human reproductive toxicity exist.

#### **Aspiration hazard**

not applicable

#### Other adverse effects

no data available

#### Additional information

no data available

## 12: Ecological information

# 12.1 Ecotoxicity

# Fish toxicity:

no data available

## Daphnia toxicity:

no data available

# Algae toxicity:

no data available

# **Bacteria toxicity:**

no data available

## 12.2 Persistence and degradability

no data available

# 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: 2.89 (20 °C)

#### 12.4 Mobility in soil:

no data available

#### 12.5 Results of PBT/vPvB assessment

no data available

## 12.6 Other adverse effects

no data available

# 13: Disposal considerations

### 13.1 Waste treatment methods

# Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal. Send to a

hazardous waste incinerator facility under observation of official regulations.

# 14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	UN Number	1134	1134	1134
14.2	UN Proper Shipping name	CHLOROBENZENE	CHLOROBENZENE	CHLOROBENZENE
14.3	Transport Hazard Class	3	3	3
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	Dangerous for the environment	Dangerous for the environment	Dangerous for the environment
14.6	Special precautions	No special precautions required		
	for user			

# 15: Regulatory information

# National regulations

no data available

# **Chemical Safety Assessment**

not relevant

# 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.