



## Safety Data Sheet

Date of Issue: 01.09.2020

Date of Expiry: 01.09.2025

### 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name: : **ECP Limited**  
Address: : PO Box 34125, Birkenhead, Auckland 0746  
Telephone: : +64 9 480 4386  
Facsimile: : +64 9 480 4385  
Emergency phone number: : 0800 243 622 (24 hours)

Product	Chloroform			Code	19001
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
67-66-3	HSR002937	1888	6.1	III	

Recommended use : Laboratory Investigations

### 2: Hazards identification

#### 2.1 GHS Classification

Acute toxicity, Oral (Category D), H302  
Skin irritation (Category A), H315  
Eye irritation (Category A), H319  
Carcinogenicity (Category B), H351  
Specific Target Organ Toxicity (Category B), H373  
Aquatic toxicity (Acute or Chronic) (Category D), H402

#### 2.2 GHS Label elements, including precautionary statements

##### Hazard Pictogram



Signal Word : **Warning**

##### Hazard statement(s)

H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.  
H351 : Suspected of causing cancer.  
H373 : May cause damage to organs through prolonged or repeated exposure.  
H402 : Harmful to aquatic life.

##### Precautionary statement(s)

##### Prevention

P201 : Obtain special instructions before use.  
P202 : Do not handle until all safety precautions have been read and understood.  
P260 : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 : Wash skin thoroughly after handling.  
P270 : Do not eat, drink or smoke when using this product.  
P273 : Avoid release to the environment.  
P280 : Wear protective gloves.

## Response

P301 + P312	:	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352	:	IF ON SKIN: Wash with plenty of soap and 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.
P308 + P313	:	IF exposed or concerned: Get medical advice/ attention.
P321	:	Specific treatment (see supplemental first aid instructions on this label).
P330	:	Rinse mouth.
P332 + P313	:	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	:	If eye irritation persists: Get medical advice/ attention.
P362	:	Take off contaminated clothing and wash before reuse.

## Storage

P405 : Store locked up.

## Disposal

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

**2.3 Other hazards** - none

## 3: Composition/information on ingredients

Substance / Mixture : Substance

### 3.1 Substances

Synonyms : Trichloromethane , Methylidyne trichloride

Formula : CHCl<sub>3</sub>

Molecular weight : 119.38 g/mol

CAS-No. : 67-66-3

EC-No. : 200-663-8

Index-No. : 602-006-00-4

## Hazardous components

Component	Classification	Concentration
Chloroform	6.1 D; 6.3 A; 6.4 A; 6.7 B; 6.9 B; 9.1 D; H302, H315, H319, H351, H373, H402 Concentration limits: 20 %: STOT SE 3, H336;	<= 100 %

## 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

### 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

### 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

### 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Chloroform	67-66-3	WES-TWA	2 ppm 9.9 mg/m <sup>3</sup>	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants
REMARKS	Carcinogen - suspected human carcinogen , Skin absorption			

## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### 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.

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### a) Appearance

Form : liquid, clear

Colour : colourless

b) Odour : sweet

c) Odour Threshold : No data available

d) pH : No data available

#### e) Melting point/freezing point

Melting point/range : -63 °C

#### f) Initial boiling point and boiling range

: 60.5 - 61.5 °C

#### g) Flash point

: - Regulation (EC) No. 440/2008, Annex, A.9 does not flash

#### h) Evaporation rate

: No data available

#### i) Flammability (solid, gas)

: No data available

#### j) Upper/lower flammability or explosive limits

: No data available

#### k) Vapour pressure

: 210 hPa at 20 °C

#### l) Vapour density

: 4.12 - (Air = 1.0)

#### m) Relative density

: 1.492 g/mL at 25 °C

#### n) Water solubility

: 8.7 g/l at 23 °C - OECD Test Guideline 105

#### o) Partition coefficient:

##### n-octanol/water

: No data available

#### p) Auto-ignition temperature

: No data available

#### q) Decomposition temperature

: Distillable in an undecomposed state at normal pressure.

#### r) Viscosity

: No data available

#### s) Explosive properties

: No data available

#### t) Oxidizing properties

: No data available

## 9.2 Other safety information

Solubility in other solvents : organic solvent at 20 °C  
- miscible  
Relative vapour density : 4.12 - (Air = 1.0)

## 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

Contains the following stabiliser(s):

2-Methyl-2-butene ( $\geq 0.001$  -  $\leq 0.015$  %)

### 10.3 Possibility of hazardous reactions

Risk of explosion with: Methanol, with, alcoholates Methanol, with, strong alkalis Iron, in powder form various alloys, sensitive to shock Methanol, with, Sodium hydroxide powdered magnesium Oxygen, with, alkali compounds Aluminium, in powder form Acetone, with, alkali compounds Potassium, sensitive to shock sodium, sensitive to shock Violent reactions possible with: Light metals, Powdered metals, Ketones, phosphines, semi metallic hydrogen compounds, bis(dimethylamino)dimethyl tin, strong oxidising agents, non-metallic hydrogen compounds, mineral acids.

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

various plastics, Rubber, Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

## 11: Toxicological information

### Acute toxicity

LD50 Oral - Rat - male - 908 mg/kg

(OECD Test Guideline 401)

LOEC Inhalation - Rat - male - 6 h - 500 ppm

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

### Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 24 h

Remarks: (ECHA)

Skin - Rabbit

Result: slight irritation

Remarks: (IUCLID)

Drying-out effect resulting in rough and chapped skin.

### Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irritating to eyes.

Remarks: (ECHA)

### Respiratory or skin sensitisation

Maximisation Test - Guinea pig

Result: negative  
(Regulation (EC) No. 440/2008, Annex, B.6)

#### **Germ cell mutagenicity**

reverse mutation assay  
Salmonella typhimurium  
Result: negative  
reverse mutation assay  
Escherichia coli  
Result: negative  
OECD Test Guideline 474  
Rat - male and female - Bone marrow  
Result: negative  
OECD Test Guideline 486  
Rat - male - Other cell types  
Result: negative

#### **Carcinogenicity**

Suspected of causing cancer.  
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Chloroform)

#### **Reproductive toxicity**

Suspected of damaging the unborn child.

#### **Specific target organ toxicity - single exposure**

May cause drowsiness or dizziness.

#### **Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. - Liver, Kidney

#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: FS9100000  
Vomiting, Cough, irritant effects, Shortness of breath, respiratory arrest, narcosis, Dizziness, Nausea, agitation, spasms, inebriation, Headache, Stomach/intestinal disorders, ataxia (impaired locomotor coordination), cardiovascular disorders  
Drying-out effect resulting in rough and chapped skin.  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **12: Ecological information**

### **12.1 Toxicity**

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 18.2 mg/l - 96 h  
Remarks: (ECHA)

### **Toxicity to daphnia and other aquatic invertebrates**

static test EC50 - Daphnia magna (Water flea) - 79 mg/l - 48 h  
Remarks: (ECHA)

### **Toxicity to algae**

static test ErC50 - Chlamydomonas reinhardtii (green algae) - 13.3 mg/l - 72 h  
Remarks: (ECHA)

### **12.2 Persistence and degradability**

No data available

Theoretical oxygen demand  
Remarks: No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

Harmful to aquatic life with long lasting effects.  
No data available

## 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## 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	1888	1888	1888
14.2	UN Proper Shipping name	CHLOROFORM	CHLOROFORM	Chloroform
14.3	Transport Hazard Class	6.1	6.1	6.1
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	none		
14.7	Incompatible materials	various plastics, Rubber , Strong oxidizing agents		

## 15: Regulatory information

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

#### National regulatory information

HSNO Approval Code: HSR002937

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits

Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

## 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.

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