

	<b>MATERIAL SAFETY DATA SHEET</b>	MSDS No.	M-01
	PERCHLOROETHYLENE	Effective From	15/11/2021

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Tetrachloroethylene(Perchloroethylene)

Supplier : BLOOMCHEMAG BV

Address: Sint - Antoniusstraat 16 b1,  
B-2400 Mol, Belgium.

Phone No.: +91 72919 74484 / 72919 74050

E-mail: info@bloomchemag.com

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Carcinogenicity (Category 2)

Chronic aquatic toxicity (Category 2)

According to European Directive 67/548/EEC as amended.

Limited evidence of a carcinogenic effect. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Label elements



Pictogram

Signal word Warning

Hazard statement(s)

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P281 Use personal protective equipment as required.

Hazard symbol(s)

Xn Harmful

N Dangerous for the environment

R-phrase(s)

R40 Limited evidence of a carcinogenic effect.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S23 Do not breathe gas/fumes/vapour/spray.

S36/37 Wear suitable protective clothing and gloves.

S61 Avoid release to the environment. Refer to special instructions/ Safety data

**Other hazards** - none

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Perchloroethylene(PCE)

Formula : C<sub>2</sub>Cl<sub>4</sub>

Molecular Weight : 165,83 g/mol

CAS-No. EC-No. Index-No. Classification Concentration

#### **Tetrachloroethylene**

127-18-4 204-825-9 602-028-00-4 Carc. 2; Aquatic Chronic 2;

H351, H411

Xn, N, Carc.Cat.3, R40 -

R51/53

-

For the full text of the H-Statements mentioned in this Section, see Section 16.

### **4. 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. 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.

### **5. FIRE-FIGHTING MEASURES**

#### **Suitable extinguishing media**

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

#### **Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

#### **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.

#### **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.

### **7. HANDLING AND STORAGE**

#### **Precautions for safe handling**

Avoid inhalation of vapour or mist.

Normal measures for preventive fire protection.

#### **Conditions for safe storage**

Store in cool place. 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**

#### **Personal protective equipment**

##### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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 such as NIOSH (US) or CEN (EU).

##### **Hand protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

##### **Eye protection**

Safety glasses with side-shields conforming to EN166

##### **Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

##### **Hygiene measures**

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

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Appearance**

Form liquid, clear

Colour colourless

#### **Safety data**

pH no data available

Melting point -22 °C - lit.

Boiling point 121 °C - lit.

Flash point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Vapour pressure 25,3 hPa at 25,0 °C

17,3 hPa at 20,0 °C

Density 1,623 g/cm<sup>3</sup> at 25 °C

Water solubility no data available

Partition coefficient:

n-octanol/water

log Pow: 3,40

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Strong oxidizing agents, Strong bases

### Hazardous decomposition products

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

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 2.629 mg/kg

LC50 Inhalation - rat - 8 h - 34.200 mg/m<sup>3</sup>

### Skin corrosion/irritation

Skin - rabbit - Severe irritation - 24 h

### Serious eye damage/eye irritation

Eyes - rabbit - Mild eye irritation - 24 h

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

Limited evidence of carcinogenicity in animal studies

IARC: 2A - Group 2A: Probably carcinogenic to humans (Tetrachloroethylene)

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

no data available

### Aspiration hazard

no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

### Signs and Symptoms of Exposure

narcosis, Liver injury may occur., Kidney injury may occur.

### Additional Information

RTECS: KX3850000

## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish LC50 - Cyprinodon variegatus (sheepshead minnow) - 9,8 mg/l - 96,0 h

LC50 - Lepomis macrochirus (Bluegill) - 13 mg/l - 96,0 h

LC50 - Oncorhynchus mykiss (rainbow trout) - 4,9 mg/l - 96,0 h

NOEC - Oryzias latipes - 17 mg/l - 10,0 d

NOEC - Cyprinodon variegatus (sheepshead minnow) - 29 mg/l - 96,0 h

Toxicity to daphnia

and other aquatic

invertebrates.

EC50 - Daphnia magna (Water flea) - 7,50 mg/l - 48 h

### **Persistence and degradability**

#### **Bioaccumulative potential**

Bioaccumulation Lepomis macrochirus (Bluegill) - 21 d

Bioconcentration factor (BCF): 49

#### **Mobility in soil**

no data available

#### **PBT and vPvB assessment**

no data available

#### **Other adverse effects**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## **13. DISPOSAL CONSIDERATIONS**

### **Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### **Contaminated packaging**

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

### **ADR/RID**

UN-Number: 1897 Class: 6.1 Packing group: III

Proper shipping name: TETRACHLOROETHYLENE

### **IMDG**

UN-Number: 1897 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: TETRACHLOROETHYLENE

Marine pollutant: Marine pollutant

### **IATA**

UN-Number: 1897 Class: 6.1 Packing group: III

Proper shipping name: Tetrachloroethylene

## **15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## **16. OTHER INFORMATION**

### **Text of H-code(s) and R-phrase(s) mentioned in Section 3**

Aquatic Chronic Chronic aquatic toxicity

Carc. Carcinogenicity

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

N Dangerous for the environment

Xn Harmful

R40 Limited evidence of a carcinogenic effect.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.