

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

Product name : Chloroacetaldehyde solution

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

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

Very toxic by inhalation. Toxic in contact with skin and if swallowed. Causes severe burns. Limited evidence of a carcinogenic effect. Very toxic to aquatic organisms.

### Label elements

#### Hazard symbol(s)

T+ Very toxic  
N Dangerous for the environment

#### R-phrase(s)

R24/25 Toxic in contact with skin and if swallowed.  
R26 Very toxic by inhalation.  
R35 Causes severe burns.  
R40 Limited evidence of a carcinogenic effect.  
R50 Very toxic to aquatic organisms.

#### S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28 After contact with skin, wash immediately with plenty of water.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

### Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.		Classification	Concentration
<b>Chloroacetaldehyde</b>				
107-20-0	203-472-8	-	Carc. 2; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Aquatic Acute 1; H301, H311, H314, H330, H351, H400 T+, N, Carc. Cat.3, R24/25 - R26 - R34 - R40 - R50	>= 45 - <= 55 %
<b>Water</b>	7732-18-5	231-791-2	-	>= 45 - <= 55 %

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

## 4. FIRST AID MEASURES

### If inhaled

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

### In case of skin contact

Wash off with soap and plenty of water.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

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

## 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

Avoid breathing vapors, mist or gas.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

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

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand 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.

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

#### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form liquid

### Safety data

pH 12 at 10 g/l at 20 °C  
Melting point -28 - -23 °C  
Boiling point 80 - 100 °C at 1.013,25 hPa  
Flash point 62 °C - closed cup

Ignition temperature > 620 °C

Lower explosion limit 39 % (V)

Upper explosion limit 90 % (V)

Vapour pressure 2.459,7976 hPa at 20 °C

Water solubility no data available

Partition coefficient: POW: 62 at 25 °C

n-octanol/water

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Oxidizing agents, Bases

### Hazardous decomposition products

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

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 89 mg/kg

LD50 Oral - mouse - 82 mg/kg

LC50 Inhalation - rat - 650 mg/l

Remarks: Lungs, Thorax, or Respiration:Respiratory obstruction. Lungs, Thorax, or Respiration:Other changes.

Vascular:BP elevation not characterized in autonomic section.

LD50 Dermal - rabbit - 267 mg/kg

LD50 Intraperitoneal - rat - 7 mg/kg

LD50 Intraperitoneal - mouse - 7 mg/kg

LD50 Intraperitoneal - guinea pig - 2,523 mg/kg

LD50 Intraperitoneal - rabbit - 5,522 mg/kg

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

Eyes: no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### 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

If Ingestion May be harmful if inhaled. May cause respiratory tract irritation.

Skins, Eyes May be harmful if absorbed through skin. May cause skin irritation.

May cause eye irritation.

### Symptoms and symptoms of exposure

Material is extremely destructive to tissue of the larynx, spasm, inflammation and upper respiratory tract, eyes, and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and upper respiratory tract, eyes, and

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

### RTECS:

AB2450000

## 12. ECOLOGICAL INFORMATION

### Toxicity

no data available

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### PBT and vPvB assessment

no data available

### Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

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

## 14. TRANSPORT INFORMATION

### ADR/RID

UN-Number: 2232 Class: 6.1

Packing group: I

EMS-No: F-A, S-A

Proper shipping name: 2-CHLOROETHANAL

Marine pollutant: No

### IATA

UN-Number: 2232 Class: 6.1

Proper shipping name: 2-Chloroethanal

IATA Passenger: Not permitted for transport

IATA Cargo: Not permitted for transport

## 15. REGULATORY INFORMATION

### This safety data sheet 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

#### Acute Tox.

Acute toxicity

Acute

Acute

Toxic if swallowed.

Toxic in contact with skin.

Causes severe burns and eye damage.

Fatal if inhaled.

Suspected of causing cancer.

Very toxic to aquatic life.