

# Material Safety Data Sheet

Section1. Product Information and Company Identification			
Product name	Carbon Disulphide		
Mol.formula	CS2	Cas no	75-15-0
Mol.wt	76.14 g/mol		
Manfacture name	Pioneers for laboratory chemicals		
Brand name	Piochem		
Address	Area 540, Industrial Zone 6 <sup>th</sup> October city Giza, Egypt.		
Website	www.piochem.com		
E-mail	info@piochem.com		

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225 Reproductive toxicity (Category 2), H361fd

Specific target organ toxicity - repeated exposure (Category 1), H372

Eye irritation (Category 2), H319 Skin irritation (Category 2), H315

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

## Classification according to EU Directives 67/548/EEC or 1999/45/EC

F Highly flammable R11
T Toxic R48/23
R62, R63

Xi Irritant R36/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

## 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Danger Hazard statement(s)

H225 Highly flammable liquid and vapour. Causes skin irritation

H315

Causes serious eye irritation. H319

Harmful if inhaled. H332

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. H361fd

Use personal protective equipment as required. H372

Precautionary statement(s) IF IN EYES: Rinse cautiously with water for several minutes. Remove

P210 contact lenses, if present and easy to do. Continue rinsing. Get medical P281

advice/ attention if you feel unwell.

P305 + P351 + P338 none

P314

Supplemental Hazard

Statements

#### 2.3 Other hazards - none

## **SECTION 3: Composition/information on ingredients**

#### 3.1 **Substances**

Formula CS<sub>2</sub>

Molecular Weight 76,14 g/mol CAS-No. 75-15-0 EC-No. 200-843-6 Index-No. 006-003-00-3

## Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Carbon disulphide

Flam. Liq. 2; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Repr. 2; STOT RE 1; H225, H302, H315, H319, H361fd, H372

#### Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

Carbon disulphide

F. T. Repr.Cat.3, R11 - R36/38 - R48/23 - R62 - R63

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

#### **SECTION 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 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

Do NOT induce vomiting. 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

## **SECTION 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, Sulphur oxides

Flash back possible over considerable distance., Container explosion may occur under fire conditions., Vapours may form explosive mixture with air., May explode when heated.

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low 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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

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

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

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.

Refrigerate before opening.

## 7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

#### **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

Components with workplace control parameters

#### 8.2 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 such as NIOSH (US) or EN 166(EU).

### 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, Flame retardant antistatic protective clothing, 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 respirator with multi-purpose combination (US) or type AXBEK (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).

## 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.

### **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: colourless

b) Odour Stench.

c) Odour Threshold no data availabled) pH no data available

e) Melting point/freezing

point

Melting point/range: -112 - -111 °C

f) Initial boiling point and

boiling range

45-47.5 °C

g) Flash point -30 °C - closed cup
h) Evapouration rate no data available
i) Flammability (solid, gas) no data available

j) Upper/lower Upper explosion limit: 50 %(V) flammability or Lower explosion limit: 1,3 %(V)

explosive limits

k) Vapour pressure 394,956 hPa at 20 °C

1.342,711 hPa at 55 °C

I) Vapour density 2,63 - (Air = 1.0)

m) Relative density 1,263 g/mL at 20 °C

n) Water solubility no data available

o) Partition coefficient: n- log Pow: 2,16 octanol/water

p) Auto-ignition no data available temperature

q) Decomposition no data available temperature

r) Viscosity no data available
 s) Explosive properties no data available
 t) Oxidizing properties no data available

## 9.2 Other safety information

Relative vapour density 2,63 - (Air = 1.0)

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

no data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Alkali metals, Zinc, Amines, Azides, Oxidizing agents

## 10.6 Hazardous decomposition products

Other decomposition products - no data available In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - rat - 1.200 mg/kg

LD50 Oral - mouse - 2.780 mg/kg

LD50 Oral - rabbit - 2.550 mg/kg

LD50 Oral - guinea pig - 2.125 mg/kg

LC50 Inhalation - rat - 2 h - 25 mg/l

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

## Respiratory or skin sensitisation

no data available

## Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

Human - lymphocyte Sister chromatid exchange

### 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

Suspected human reproductive toxicant

May cause reproductive disorders.

## Specific target organ toxicity - single exposure

no data available

## Specific target organ toxicity - repeated exposure

Inhalation - Causes damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

no data available

#### **Additional Information**

RTECS: FF6650000

May cause convulsions.

Liver - Irregularities - Based on Human Evidence

#### **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC50 - other fish - 162 mg/l - 96 h

Toxicity to algae Growth inhibition EC50 - Chlorella pyrenoidosa - 21 mg/l - 96 h

### 12.2 Persistence and degradability

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.

no data available

#### **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

## **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

## 14.1 UN number

ADR/RID: 1131 IMDG: 1131 IATA: 1131

#### 14.2 UN proper shipping name

ADR/RID: CARBON DISULPHIDE IMDG: CARBON DISULPHIDE IATA: Carbon disulphide

Passenger Aircraft: Not permitted for transport Cargo Aircraft: Not permitted for transport 14.3 Transport hazard class(es)

ADR/RID: 3 (6.1) IMDG: 3 (6.1) IATA: 3 (6.1)

14.4 Packaging group

ADR/RID: I IMDG: I IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

## 14.6 Special precautions for user

no data available

## **SECTION 15: Regulatory information**

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

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

no data available

## 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

## Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity
Eye Irrit. Eye irritation
Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure.

Repr. Reproductive toxicity

Skin Irrit. Skin irritation

## Full text of R-phrases referred to under sections 2 and 3

F Highly flammable

T Toxic

R11 Highly flammable.
R36/38 Irritating to eyes and skin.

R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R62 Possible risk of impaired fertility.

R63 Possible risk of harm to the unborn child. Repr.Cat.3 Toxic to Reproduction Category 3