

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : C 11329

Product Name : Carbon disulphide

Manufacturer / supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India

Tel - 0484 2800212, 2802755

Contact For Information : Tel . No. – 0484 2802536 Fax : 0484 2802483

Emergency Telephone No. : 0484 2801583 Telefax No. : 0484 2802483

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS-No : 75-15-0

Ec-Index No. : 006-003-00-3

EC-No. : 200-843-6

Molecular Formula : CS₂

Molar mass : 76.14

3. HAZARDS IDENTIFICATION

Highly flammable. Irritating to eyes and skin. Toxic: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of harm to unborn child.

4. FIRST AID MEASURES

After inhalation: fresh air. If necessary apply mouth to mouth

resuscitation or mechanical ventilation.



Catalogue No. : C 11329

Product Name : Carbon disulphide

After skin contact: wash off with plenty of water .Remove

contaminated clothing

After eye contact: rinse out with plenty of water if pain persists

consult an eye specialist

After swallowing: Caution if victim vomits. Risk of aspiration!

Summon doctor. Laxative: Activated charcoal. Sodium sulphate (1

table spoon/1/4 l water). No castor oil.

5. FIRE – FIGHTING MEASURES

Suitable extinguishing media: Water, CO₂, foam, powder.

Special risks: Combustible. Vapours heavier than air. Formation of explosible mixtures possible with air. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: Toxic vapours, sulphur oxides.

Special protective equipment for fire fighting: Do not stay in dangerous zone without self contained breathing apparatus.

Other information: Take measures to prevent electrostatic charging. Prevent fire fighting water from entering surface water or ground water.

6. ACCIDENTAL RELEASE MEASURES

Procedures for cleaning / absorption:

Take up with liquid absorbent material. Forward for disposal. Clean up affected area.



Catalogue No. : C 11329

Product Name : Carbon disulphide

Person – related precautionary measures:

Do not inhale vapours/ aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental protection measures: Do not allow to enter sewage system.

7. HANDLING AND STORAGE

Handling: Take measures to prevent electrostatic charging.

Storage: Tightly closed Dry .In a well ventilated place. Keep away from sources of ignition and heat. At +5 0 C to 30 0 C. Accessible only for authorised persons.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: required when vapours/aerosols are generated.

Eye protection : required Hand protection : required

Protective clothing should be selected for the working place depending on concentration and quantity of the hazardous substance handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier

Industrial hygiene: Change contaminated clothing. Application of skin protective barrier cream recommended. Wash hands after working with substance.

NILLE SAFETY DATA SHEET

Catalogue No. : C 11329

Product Name : Carbon disulphide

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Colour : colourless

Odour : characteristic

PH value : not available

At $10 \text{ g/l H}_2\text{O} (20^{\circ}\text{C})$

Melting temperature: -111.6 °C

Boiling temperature : 46.5 °C

Ignition temperature: 100 °C

Flash point : $\sim 30^{\circ}$ C

Explosion limits lower : 1 vol%

Upper: 60 vol%

Density (20°C) : 1.26 g/cm^{3}

Solubility in water (20° C): 2.1 g/l

10. STABILITY AND REACTIVITY

Conditions to be avoided: heating.

Substance to be avoided: alkali metals, halogen-halogen compounds, halogen oxides, halogens, hydrazine and derivatives, carbon, no metals, nitrogen oxides, permanganic acid Aluminium, zinc in powder form.

Hazardous decomposition products : in the event of fire: toxic vapours, sulphur oxides.

Further information: highly flammable.



unsuitable working materials: various plastics, rubber. Explosible with air in a vaporous / gaseous state.

Catalogue No. : C 11329

Product Name : Carbon disulphide

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD ₅₀ (oral, rat): 3188 mg/Kg

LC ₅₀ (inhalation, rat): 25 g/m ³/ 2h;

LCL o (inhalation, human): 4000ppm(V)/30 min;

Subacute to chronic toxicity: The information available to us suggests that the risk of an embryotoxic effect must be considered probable. Pregnant women should not be exposed to the product. Animal experiments suggests that the substance may lead to an impairement of reproductive performance also in man. So far no data are available on sensitisation So far no data are available on carcinogenicity. No carcinogenic properties suspected. No mutagenic effect in animal experiment.

Bacterial mutagenicity: no indication of mutagenic activity. Ames-Test: negative.

Further toxicological information

After inhalation of vapours: inebriation, agitation, spasms, narcosis. Cannot be excluded: respiratory paralysis, death.

After skin contact: Severe irritations. Danger of skin absorption, After long term exposure to the chemical: Neurotoxic effects. Tiredness, muscular symptoms. After a latency period: gastrointestinal complaints, psychoses. Cannot be excluded: changes in blood picture, cardiac dysrhythmia.

After contact with substance: severe mucosal irritations.

After swallowing: vomiting, head ache, cyanosis, respiratory paralysis, drop in blood pressure, unconsciousness, spasms.

Catalogue No. : C 11329

Product Name : Carbon disulphide

12. ECOLOGICAL INFORMATION

Behaviour in environmental compartments:

Distribution: LogP(oct):1.84-1.94

BCF: 4.3

No appreciable bio accumulation potential is to be expected

 $(\log p(o/w)1-3).$

Ecotoxic effects: Biologic effects:

Toxic for aquatic organisms. Hazard for drinking water supplies.

Toxic effect on fish and plankton.

Fish toxicity: P. reticulants LC₅₀: 4mg/l/96h;

Daphnia toxicity: daphnia magna EC₅₀: 2.1mg/l/48h;

Bacterial toxicity: Photobacterium phophoreum EC₅₀: 341

mg/l/15min;

Algeal toxicity: Chl.pyrenoidosa IC₅₀: 21mg/l/96h;

Biologic degradation:

Readily biodegradable . Biodegradation: 80% / 28d (closed bottle

test).

Further ecologic data:

Do not allow to enter waters, waste water or soil.



13. DISPOSAL METHOD

Product: There are no uniform EC regulations for The disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Catalogue No. : C 11329

Product Name : Carbon disulphide

Packaging: Disposal in compliance with official Regulations. Handle contaminated packaging as In the same way as the substance itself. If not officially specified differently, non – contaminated packaging may be treated like household waste or recycled.

14. TRANSPORT INFORMATION

Transport over land

ADR/RID and GGVS/GGVE: GGVS/GGVE class: 3 Number and letter:18a

ADR/RID class : 3 Number and letter: 18a

Name of material : CARBON DISULPHIDE

River transport AND/ADNR: Not examined

Sea transport IMDG: IMDG class:3.1 UN –No.:1131 Packaging group: I

Ems : 3-01 MFAG: 210

Correct technical name: CARBON DISULPHIDE

Air transport

ICAO-TI and IATA-DGR: ICAO/IATA class: 3 UN/ID-No.: 1131 Packaging group:

Correct technical name: CARBON DISULPHIDE

15. REGULATORY INFORMATION

Labelling according to EC Directives



Symbol : T Toxic

F highly flammable.

R- Phrases : 11-36/38-48/23-62-63 Highly flammable. Irritating to eyes and

skin.

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

Possible risk of impaired fertility. Possible risk of harm to the unborn child.

Catalogue No. : C 11329

Product Name : Carbon disulphide

S-phrases: 16-33-36/37-45 Keep away from sources of ignition- No smoking.

Take precautionary measures against static

discharges. Wear suitable protective clothing and

gloves. In case of accident or if you feel unwell,

seek medical advice immediately.

Water pollution class : 2 (polluting substance)

16. OTHER INFORMATION

Reason for alteration

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.