



## MATERIAL SAFETY DATA SHEET CARBON DISULFIDE

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	: Carbon disulfide	<b>LABORT FINE CHEM PVT LTD.</b>
CAS	: 75-15-0	<b>Office:</b> 703-704 Icon Business Centre, Opp. Central Mall, Nr. Valentine Cinema, Dumas Road, Surat - 395007, (GUJARAT), INDIA.
Synonym	:	Ph: 0091-261-2725761; 2725388
Chemical Name	: Carbon disulfide	Fax: 0091-261-2725388
Chemical formula	: CS <sub>2</sub>	<b>E Mail:</b> <a href="mailto:info@laboratorychemical.net">info@laboratorychemical.net</a> <b>Website:</b> <a href="http://www.laboratorychemical.net">www.laboratorychemical.net</a>
Molecular weight	: 76.14	<b>Factory:</b> Plot No. 320, G.I.D.C. Ichhapore Industrial Estate, Opp-ONGC, Taluka- Choryasi, District Surat, Gujarat., PIN 394510, India

### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

#### Composition:

Chemical Name	CAS #	% weight
Carbon disulfide	75-15-0	100

**Toxicological Data on Ingredients:** Carbon disulfide: ORAL (LD50): Acute: 3188 mg/kg [Rat]. 2780 mg/kg [Mouse]. VAPOR (LC50): Acute: 12500 ppm 4 hour(s) [Rat].

### SECTION 3: HAZARDS IDENTIFICATION

#### Potential Acute Health Effects:

Extremely hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Very hazardous in case of skin contact (permeator). Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

#### Potential Chronic Health Effects:

Extremely hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Very hazardous in case of skin contact (permeator).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance is toxic to kidneys, the nervous system, liver.

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged inhalation of

vapors may lead to chronic respiratory irritation.

## SECTION 4: FIRST AID MEASURES

### Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

### Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:** Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

### Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion:** Not available.

## SECTION 5: FIRE AND EXPLOSION DATA

**Flammability of the Product:** Flammable.

**Auto-Ignition Temperature:** 90°C (194°F)

**Flash Points:** CLOSED CUP: -30°C (-22°F). (Setaflash)

**Flammable Limits:** LOWER: 1.3% UPPER: 50%

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Flammable in presence of open flames and sparks, of oxidizing materials.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

Flammable liquid, soluble or dispersed in water.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## SECTION 6: ACCIDENTAL RELEASES MEASURE

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Large Spill:**

Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Be careful that the product is not present at a concentration level above TLV.

Check TLV on the MSDS and with local authorities.

## SECTION 7: HANDLING AND STORAGE

### Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

### Storage:

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

## SECTION 8: PERSONAL PROTECTION

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### Personal Protection:

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

### Exposure Limits:

TWA: 20 CEIL: 30 (ppm)

TWA: 60 CEIL: 90 (mg/m<sup>3</sup>) Consult local authorities for acceptable exposure limits.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical state and appearance:** Liquid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** 76.14 g/mole

**Color:** Clear Colorless.

**pH (1% soln/water):** 7 [Neutral.]

**Boiling Point:** 46.3°C (115.3°F)

**Melting Point:** -111.6°C (-168.9°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 1.2632 (Water = 1)

**Vapor Pressure:** 297.6 mm of Hg (@ 20°C)

**Vapor Density:** 2.63 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** 0.1 ppm

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Not available.

**Solubility:** Very slightly soluble in cold water.

## SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Not available.

**Incompatibility with various substances:** Not available.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Routes of Entry:** Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.

Acute oral toxicity (LD50): 2780 mg/kg [Mouse].

Acute toxicity of the vapor (LC50): 12500 ppm 4 hour(s) [Rat].

**Chronic Effects on Humans:** The substance is toxic to kidneys, the nervous system, liver.

**Other Toxic Effects on Humans:**

Extremely hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Very hazardous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:**

Embryotoxic and/or foetotoxic in animal. Human: passes through the placenta, excreted in maternal milk. Risk of spontaneous abortion in human. Causes sperm abnormalities in human. Menstrual disorders in human.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## SECTION 14: TRANSPORT INFORMATION

**DOT Classification:** Class 3: Flammable liquid.

**Identification:** : Carbon Disulfide : UN1131 PG: II

## SECTION 15: OTHER REGULATORY INFORMATION

### **WHMIS (Canada):**

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

### **DSCL (EEC):**

R11- Highly flammable.

R38- Irritating to skin.

R41- Risk of serious damage to eyes.

### **HMIS (U.S.A.):**

**Health Hazard:** 3

**Fire Hazard:** 3

**Reactivity:** 0

**Personal Protection:** h

### **National Fire Protection Association (U.S.A.):**

**Health:** 3

**Flammability:** 4

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves.

Lab coat.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## SECTION 16: OTHER INFORMATION

### **Product Use:**

Laboratory Reagent.

### **Disclaimer:**

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