

## Material Safety Data Sheet



# CARBON DISULFIDE

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**Carolina Biological Supply Company**

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

**CAROLINA**  
www.carolina.com

### Section 1 - Product Description

**Product Name:** Carbon Disulfide

**Product Code(s):** 85-2860, 85-2880

**Size:** 500 mL

**Chemical Name:** Carbon Disulfide

**CAS Number:** 75-15-0

**Formula:** CS<sub>2</sub>

**Synonyms:** Carbon Bisulfide

**Distributor:** Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 - Hazard Identification

**Emergency Overview:** Avoid contact with skin and eyes. Very Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Causes severe burns. Extremely flammable.

**Potential Health Effects:**

**Eyes:** Causes severe burns and eye damage upon direct contact. Vapor is irritating.

**Skin:** May cause severe irritation or chemical burns.

**Ingestion:** May severely irritate or damage digestive tract.

**Inhalation:** May severely irritate or damage mucous membranes and respiratory tract.

### Section 3 - Composition / Information on Ingredients

**Principal Hazardous Components:** Carbon Disulfide (CAS# 75-15-0) 100%

**TLV units:** ACGIH-TLV: 10 ppm (skin) (TWA)

**PEL units:** OSHA-PEL: 20 ppm (TWA); 100 ppm (STEL); 30 ppm (Ceiling)

### Section 4 - First Aid Measures

**Emergency and First Aid Procedures:**

**Eyes** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin** - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

**Ingestion** - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel.

Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.  
**Inhalation** - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

## Section 5 - Firefighting Procedures

**Flash Point (Method Used):** -30 °C (CC)

**NFPA Rating:**

**Health:** 2

**Fire:** 3

**Reactivity:** 0

**Extinguisher Media:** Water spray.

Use dry chemical, CO2 or appropriate foam.

**Flammable Limits in Air % by Volume:** LEL 1.3% UEL 50.0%

**Autoignition Temperature:** 100 °C

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Explosive when mixed with oxidising substances.

Above flashpoint, explosive vapor-air mixtures may be formed.

Extreme risk of explosion by shock, friction, fire or other sources of ignition.

Extremely flammable.

Take precautionary measures against static discharges.

Fire or excessive heat may produce hazardous decomposition products.

## Section 6 - Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

## Section 7 - Special Precautions

**Precautions to Take in Handling or Storing:** Use only in well-ventilated areas.

Keep container tightly closed in a cool, well-ventilated place.

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... (Water, unless specified as a water reactive material).

Avoid contact with skin and eyes.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

Keep away from combustible material.

Extremely flammable.

This material should be kept in an area suitable for the storage of flammable liquids.

Keep away from oxidizing materials and strong acids.

Avoid direct sunlight and heat.

## Section 8 - Protection Information

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

**Ventilation:**

**Local Exhaust:** Yes

**Mechanical(General):** Yes

**Special:** No

**Other:** No

**Protective Gloves:** Natural rubber, Neoprene, PVC or equivalent.

**Eye Protection:** Splash proof chemical safety goggles should be worn.

**Other Protective Clothing or Equipment:** Lab coat, apron, eye wash, safety shower.

## Section 9 - Physical Data

**Molecular Weight:** N/A

**Boiling Point:** 46 °C

**Vapor Density(Air=1):** 2.64

**Percent Volatile by Volume:** 100% at 21 °C

**Solubility in Water:** Slightly Soluble

**Melting Point:** -112 °C

**Vapor Pressure:** 400 mmHg at 20 °C

**Specific Gravity (H2O=1):** 1.2629 at 20 °C

**Evaporation Rate (BuAc=1):** (Butyl Acetate=1) 22.6

**Appearance and Odor:** Yellow liquid, unpleasant, irritating odor.

## Section 10 - Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** Spontaneously flammable in air.

Shock, contact with reducing materials

Direct sunlight; Product is photosensitive.

Heat and sources of ignition.

**Incompatibility (Materials to Avoid):** Sodium Hypochlorite, Alkalis, Metals, Amines, Halogens, Oxidizers, Acids,

**Hazardous Decomposition Products:** COx,

**Hazardous Polymerization:** Will not occur

## Section 11 - Toxicity Data

**Toxicity Data:** orl-rat LD50 1200 mg/kg

**Effects of Overexposure:**

**Acute:** See Section 2

**Chronic:** Reproductive data cited. Not listed as a carcinogen by IARC, NTP or OSHA.

**Conditions Aggravated by Overexposure:** Impaired Kidney Function, Liver disorders, Cardiovascular system, Eye disorders, Respiratory disorders,

**Target Organs:** Eyes, Skin, Respiratory system, Liver, Kidneys,

**Primary Route(s) of Entry:** Inhalation, ingestion, eye or skin contact.

## Section 12 - Ecological Data

**EPA Waste Numbers:** P022

## Section 13 - Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

## Section 14 - Transport Information

**DOT Proper Shipping Name:** UN1131, Carbon Disulfide, 3, I

## Section 15 - Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Chronic Acute

**Name List:**

**Chemical Category:**

Yes

No

**CERCLA Section 103 RQ(lb.):** 100

**RCRA Section 261.33:** Yes

## Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act