



J.T. Baker Inc.
222 Red School Lane
Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151
National Response Center 800-424-8802
Chemtrec 800-424-9300

National Response in Canada
CANUTEC 613-996-6666
Outside U.S. and Canada
Chemtrec 202-483-7616

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals. All non-emergency questions should be directed to Customer Service (1-800-JTBAKER) for assistance.

MATERIAL SAFETY DATA SHEETFICHE
SIGNALETIQUEHOJAS DE DATOS
DE SEGURIDAD

C0979 -07
Effective: 02/25/93

Carbon Tetrachloride

Page: 1
Issued: 06/30/94

J.T.BAKER INC., 222 Red School Lane, Phillipsburg, NJ 08865

6810-00-K26-4224

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SECTION I - PRODUCT IDENTIFICATION

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Product Name: Carbon Tetrachloride
Common Synonyms: Carbon Tet; Tetrachloromethane; Methanetetrachloride;
Perchloromethane
Chemical Family: Chlorinated Hydrocarbons
Formula: CCl₄
Formula Wt.: 153.82
CAS No.: 56-23-5
NIOSH/RTECS No.: FG4900000
Product Use: Laboratory Reagent
Product Codes: 1512, 1511, 1516, 1510, 1513, 1514

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PRECAUTIONARY LABELING

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BAKER SAF-T-DATA* System



Laboratory Protective Equipment



U.S. Precautionary Labeling

POISON! DANGER!

WARNING: Carbon Tetrachloride is a substance which harms public health and the environment by destroying the ozone in the upper atmosphere. MAY BE FATAL IF SWALLOWED OR INHALED. EXCEPTIONAL HEALTH AND CONTACT HAZARDS: READ MATERIAL SAFETY DATA SHEET. NOTE: REPORTED AS CAUSING CANCER IN LABORATORY ANIMALS. EXERCISE DUE CARE. NOT FOR HOUSEHOLD USE. HARMFUL IF ABSORBED THROUGH SKIN.

Continued on Page: 2



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Page: 2
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PRECAUTIONARY LABELING (CONTINUED)

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Do not get in eyes, on skin, on clothing. Do not breathe vapor. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling. In case of spill, soak up with sand or earth.

International Labeling

Very toxic by inhalation and in contact with skin. Possible risks of irreversible effects.
 Keep out of reach of children. In case of insufficient ventilation, wear suitable respiratory equipment. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SAF-T-DATA* Storage Color Code: Blue (health)

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SECTION II - COMPONENTS

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Component	CAS No.	Weight %	OSHA/PEL	ACGIH/TLV
Carbon Tetrachloride	56-23-5	99-100	2 ppm	5 ppm

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SECTION III - PHYSICAL DATA

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Boiling Point: 77°C (170°F) (at 760 mm Hg)	Vapor Pressure (mmHg): 91 (20°C)
Melting Point: -23°C (-9°F) (at 760 mm Hg)	Vapor Density (air=1): 5.3
Specific Gravity: 1.59 (H ₂ O=1)	Evaporation Rate: N/A
Solubility(H ₂ O): Negligible (<0.1%)	% Volatiles by Volume: 100 (21°C)
pH: N/A	
Odor Threshold (ppm): N/A	Physical State: Liquid
Coefficient Water/Oil Distribution: N/A	



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Page: 3
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SECTION III - PHYSICAL DATA (CONTINUED)

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Appearance & Odor: Clear, colorless liquid. Characteristic odor.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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Flash Point (Closed Cup): N/A

NFPA 704M Rating: 3-0-0

Autoignition Temperature: N/A

Flammable Limits: Upper - N/A Lower - N/A

Fire Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

Special Fire-Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

Unusual Fire & Explosion Hazards

None identified.

Toxic Gases Produced

hydrogen chloride, phosgene, chlorine

Explosion Data-Sensitivity to Mechanical Impact

None identified.

Explosion Data-Sensitivity to Static Discharge

None identified.

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SECTION V - HEALTH HAZARD DATA

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Threshold Limit Value (TLV/TWA): 31 mg/m³ (5 ppm)

The TLV listed denotes TLV (skin).

Short-Term Exposure Limit (STEL): Not Established

Permissible Exposure Limit (PEL): 12.6 mg/m³ (2 ppm)

Continued on Page: 4



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Page: 4
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SECTION V - HEALTH HAZARD DATA (CONTINUED)

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Toxicity of components

Oral Rat LD ₅₀ for Carbon Tetrachloride	2800 mg/kg
Oral Mouse LD ₅₀ for Carbon Tetrachloride	12.8 g/kg
Intraperitoneal Rat LD ₅₀ for Carbon Tetrachloride	1500 mg/kg
Skin Rat LD ₅₀ for Carbon Tetrachloride	5070 mg/kg
Carcinogenicity: NTP: Yes IARC: Yes Z List: No OSHA Reg: No	

Carcinogenicity

This substance is listed as an ACGIH suspected human carcinogen, a NTP anticipated human carcinogen, and an IARC probable human carcinogen (Groups 2A and 2B).

Reproductive Effects

None identified.

Effects of Overexposure

INHALATION: is harmful and may be fatal, headache, nausea, vomiting, dizziness, drowsiness, irritation of upper respiratory tract, unconsciousness

SKIN CONTACT: irritation, prolonged contact may cause dermatitis

EYE CONTACT: irritation, may cause temporary corneal damage

SKIN ABSORPTION: rapid absorption

INGESTION: is harmful and may be fatal, headache, nausea, vomiting, dizziness, gastrointestinal irritation, blurred vision, low blood pressure

CHRONIC EFFECTS: kidney damage, liver damage

Target Organs

central nervous system, eyes, skin, lungs, liver, kidneys

Medical Conditions Generally Aggravated by Exposure

liver disorders, kidney disorders, alcoholism, central nervous system disorders

Continued on Page: 5



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Page: 5
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SECTION V - HEALTH HAZARD DATA (CONTINUED)
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Primary Routes of Entry

inhalation, ingestion, absorption, eye contact, skin contact

Emergency and First Aid Procedures

- INGESTION: CALL A PHYSICIAN. If swallowed, do NOT induce vomiting.
- INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential.
- SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before re-use.
- EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.

Notes to Physician

Do not use Adrenalin or Epinephrine.

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SARA/TITLE III HAZARD CATEGORIES and LISTS
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Acute: Yes Chronic: Yes Flammability: No Pressure: No Reactivity: No

Extremely Hazardous Substance: No

CERCLA Hazardous Substance: Yes Contains Carbon Tetrachloride (RQ = 5000 LBS)

SARA 313 Toxic Chemicals: Yes Contains Carbon Tetrachloride
Generic Class: Generic Class Removed from CFR: 7/1/91

TSCA Inventory: Yes

State Lists: For products sold in the state of California, the state requires that we provide to users and their employees the following message: WARNING: THIS PRODUCT IS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

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SECTION VI - REACTIVITY DATA
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Stability: Stable Hazardous Polymerization: Will not occur

Conditions to Avoid: heat, flame, other sources of ignition

Continued on Page: 6



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Page: 6
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SECTION VI - REACTIVITY DATA (CONTINUED)

Incompatibles: alkali metals, sodium, potassium, chemically active metals, strong oxidizing agents, allyl alcohol, dimethyl formamide, fluorine, strong bases

Decomposition Products: hydrogen chloride, chlorine, phosgene

SECTION VII - SPILL & DISPOSAL PROCEDURES

Steps to be Taken in the Event of a Spill or Discharge

Wear self-contained breathing apparatus and full protective clothing. Stop leak if you can do so without risk. Use water spray to reduce vapors. Take up with sand or other non-combustible absorbent material and place into container for later disposal. Flush spill area with water.

J. T. Baker SOLUSORB^R solvent adsorbent is recommended for spills of this product.

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: U211 (Toxic Waste)

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation: Use general or local exhaust ventilation to meet TLV requirements.

Respiratory Protection: Respiratory protection required if airborne concentration exceeds TLV. At concentrations above 5 ppm, a self-contained breathing apparatus is advised.

Eye/Skin Protection: Safety goggles and face shield, uniform, protective suit, polyvinyl alcohol gloves are recommended.



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Page: 7
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SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA* Storage Color Code: Blue (health)

Storage Requirements

Keep container tightly closed. Store in secure poison area. Isolate from incompatible materials.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T.)

Proper Shipping Name: CARBON TETRACHLORIDE
Hazard Class: 6.1
UN/NA: UN1846 Reportable Quantity: 10 LBS. Packaging Group: II
Labels: 6 POISON
Regulatory References: 49CFR 172.101

International (I.M.O.)

Proper Shipping Name: CARBON TETRACHLORIDE
Hazard Class: 6.1 I.M.O. Page: 6096
UN: UN1846 Marine Pollutants: Yes Packaging Group: II
Labels: POISON
Regulatory References: 49CFR PART 176; IMDG Code

AIR (I.C.A.O.)

Proper Shipping Name: CARBON TETRACHLORIDE
Hazard Class: 6.1
UN: UN1846 Packaging Group: II
Labels: POISON
Regulatory References: 49CFR PART 175; ICAO=== We believe the transportation data and references contained herein to be factual and the opinion of qualified experts. The data is meant as a guide to the overall classification of the product and is not package size specific, nor should it be taken as a warranty or representation for which the company assumes legal responsibility.=== The information is offered solely for your consideration, investigation, and verification. Any use of the information must be determined by the user to be in accordance with applicable Federal, State, and Local laws and regulations. See shipper requirements 49CFR 171.2, Certification 172.204, and employee training 49 CFR 173.1(b).