

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 **Revision date: 07/06/2018**

1. IDENTIFICATION

Product name: Carbon Tetrabromide

Product code: T0038

For laboratory research purposes. Product use: Restrictions on use: Not for drug or household use.

Company: TCI America

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Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Oral [Category 4]

Skin Corrosion/Irritation [Category 2] WHMIS 2015: Eye Damage/Irritation [Category 1]

Specific Target Organ Toxicity (Single Exposure) [Category 1] Specific Target Organ Toxicity (Single Exposure) [Category 2] Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 1] Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Danger! Signal word:

Hazard Statement(s): Harmful if swallowed

Causes skin irritation Causes serious eye damage

Causes damage to: Liver Respiratory System Kidney

May cause damage to organs: Nervous System May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure: Liver

May cause damage to organs through prolonged or repeated exposure: Respiratory System

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Response]

[Prevention] Do not breathe dust, fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear

protective gloves, face protection.

If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call

a poison center or doctor. If exposed: Call a poison center or doctor.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. [Storage] [Disposal]

Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified: [HNOC]

None.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Carbon Tetrabromide

 Percent:
 >99.0%(GC)

 CAS RN:
 558-13-4

 Molecular Weight:
 331.63

 Chemical Formula:
 CBr4

Synonyms: Tetrabromomethane

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Call a POISON CENTER or doctor/physician.

Ingestion: Call a POISON CENTER or doctor/physician. Rinse mouth.

Symptoms/effects:

Acute: Dizziness. Pain. Redness. Drowsiness.

Delayed: No data available

Indication of any immediate medical attention:

Not available.

Notes to physician:

No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Specific hazards arising from the

chemical:

n products: These products include: Carbon oxides Halogenated compounds

Hazardous combustion products:

Other specific hazards: Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Environmental precautions:

Environmental precautions:

Methods and materials for containment

and cleaning up:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains.

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

dispersion of dust. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

ACGIH TLV(TWA): 0.1 ppm ACGIH TLV(STEL): 0.3 ppm

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators

approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder
Colour: White
Odour: No data available
Odor threshold: No data available
Odour threshold: No data available

Melting point/freezing point:94°C (201°F)pH:No data availableBoiling point/range:190°C (374°F)Vapour pressure:No data available

Decomposition temperature: No data available Vapour density: 11.4

Relative density: No data available Dynamic Viscosity: No data available Dynamic Viscosity: No data available

Kinematic viscosity: No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

Flash point: No data available Autoignition temperature: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available
Upper: No data available

Solubility(ies):

[Water] Insoluble (0.024g/100mL, 30°C)

[Other solvents]

Soluble: Many organic solvents

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions. Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents, Strong bases

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Hydrogen bromide

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11. TOXICOLOGICAL INFORMATION

RTECS Number: FG4725000

Acute Toxicity:

scu-mus LD50:298 mg/kg ivn-mus LD50:56 mg/kg

orl-rat LD:3 g/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s):

Causes damage to: Liver Respiratory System Kidney May cause damage to organs: Nervous System

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure: Liver

May cause damage to organs through prolonged or repeated exposure: Respiratory System

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available Fish: Crustacea: No data available Algae: No data available

Persistence / degradability: No data available 86

Bioaccumulative potential(BCF):

Mobility in soil

Log Pow: 3.42 Soil adsorption (Koc): 49 Henry's Law (PaM 3/mol): 49.6

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and

Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for

Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil. Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance. Carbon Tetrabromide TCI AMERICA Page 5 of 5

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2516 Carbon tetrabromide 6.1 Toxic material.

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2516 Carbon tetrabromide 6.1 Toxic material.

IMDG

UN UN2516 Proper Shipping Name: Class or Division: Packing Group:

numb Carbon tetrabromide 6.1 Toxic material. III

er:

Marine Pollutant:Marine PollutantEmS number:F-A, S-A

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations

State Right-to-Know

MassachusettsListedNew JerseyListedPennsylvaniaListedCalifornia Proposition 65:Not Listed

Other Information

NFPA Rating: HMIS Classification: Health: 2
Flammability: 0 Flammability: 0
Instability: 0 Physical: 0

International Inventories

 Canada: DSL
 On DSL

 EC-No:
 209-189-6

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.