

# SAFETY DATA SHEET

SDS No.1021-21106

Revised Date January 27, 2015 1/4 page

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Carbontetrachloride  
NAME OF MANUFACTURER : GL Sciences Inc.  
ADDRESS : 22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan  
CHARGE SECTION : International Sales Section  
TELEPHONE No. : +81-3-5323-6620  
FACSIMILE No. : +81-3-5323-6621  
PRODUCT No. : 1021-21106  
SDS No. : 1021-21106  
Research use only.

## 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Acute toxicity- inhalation : Category 4  
Skin corrosion/irritation : Category 2  
Serious eye damage/eye irritation : Category 2  
Carcinogenicity : Category 2  
Reproductive toxicity : Category 2  
Specific target organ toxicity (single exposure) : Category 1<nervous system, liver, kidney>  
Specific target organ toxicity (repeated exposure) : Category 1<liver, kidney>  
Category 2<aspiration system>  
Hazardous to the aquatic environment –acute hazard : Category 1  
Hazardous to the aquatic environment –chronic hazard : Category 1  
Hazardous to the Ozone layer : Category 1

### HAZARDS SYMBOL :



SIGNAL WORD : Danger

### HAZARD STATEMENTS :

H332 Harmful if inhaled  
H315 Cause skin irritation  
H319 Cause serious eye irritation  
H351 Suspected of causing cancer  
H361 Suspected of damaging fertility or the unborn child  
H370 Cause damage to organs  
H372 Cause damage to organs through prolonged or repeated exposure  
H373 May cause damage to organs through prolonged or repeated exposure  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting effects  
H420 Harms public health and the environment by destroying ozone in the upper atmosphere

### PRECAUTIONARY STATEMENTS :

P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust or mist.  
P264 Wash hands and eyes thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable.

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P332+P313	If skin irritation occurs: Get medical attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P308+P311	IF exposed or concerned: Call a POISON CENTER or doctor.
P314	Get medical attention if you feel unwell.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container in accordance with all applicable regulations.
P502	Refer to manufacturer or supplier for information on recovery or recycling

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	: Carbontetrachloride
SYNONYMS	: Tetrachloromethane, Perchloromethane
CHEMICAL FOMULA	: CCl4
CONTENT	: > 99.0%
CAS No.	: 56-23-5
TSCA INVENTRY	: Listed
EINECS No.	: 200-262-8
EC INDEX No.	: 602-008-00-5

4. FIRST AID MEASURES

GENERAL ADVICE	: Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
INHALATION	: Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
SKIN CONTACT	: Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
EYE CONTACT	: Remove any contact lenses at once. Flush eyes well with flooding large amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
INGESTION	: Rinse mouth. Never give anything by mouth to an unconscious person. Consult a physician immediately.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	: Noncombustible. Carbon dioxide, dry chemical powder, foam, water spray
FIRE & EXPLOSION HAZARDS	: Toxic, irritating smoke or gas may be emitted.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS	: Firemen should wear normal protective equipment(full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	: In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
ENVIROMENTAL PRECATIONS	: Prevent spills from entering sewers, watercourses or low areas.
METHODS FOR CLEAN UP	: Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Pull all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose contaminated clothing.

7. HANDLING AND STORAGE

HANDLING	: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Handle this material with suitable protection. After using this product, dispose of contents/container in accordance with all applicable regulations and appropriate ways.
STORAGE	: Store away from sunlight in well-ventilated dry place. Keep container tightly closed.
INCOMOPATIBLE PRODUCTS	: Light metals(sodium, potassium, magnesium, barium)

---

**8. EXPOSURE CONTROL/PERSONAL PROTECTION**

ENGINEERING MEASURES	: Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
VENTILATION	: Local Exhaust ; Necessary, Mechanical(General) ; Necessary
PERSONAL PROTECTION	
RESPIRATORY PROTECTION	: Use respirators approved under appropriate government standards and follow all regulations
HAND PROTECTION	: Protective gloves
EYE PROTECTION	: Safety glasses(goggles)
SKIN PROTECTION	: Protective clothing
CONTROL PARAMETERS	
OSHA PEL	: air TWA 10ppm CL 25ppm PK 200ppm/5min/4hr
NIOSH REL	: Ca ST 2 ppm (12.6 mg/m <sup>3</sup> ) [60-minute]
ACGIH	: TWA 5ppm(skin)

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	: Colorless – clear liquid
SHAPE	: Liquid
ODOR	: Characteristic odor
pH	: No data available
BOILING POINT	: 77 °C
MELTING POINT	: -23 °C
FLASH POINT	: No data available
FLAMMABILITY	: No data available
AUTOIGNITION TEMPERATURE	: No data available
VAPOR PRESSURE	: 12.2 kPa (20 °C)
VAPOR DENSITY	: 5.32(Air=1)
DENSITY	: 1.593
SOLUBILITY IN	
Water	: Very slightly soluble
Organic solvent	: Miscible
PARTITION COEFFICIENT: n-octanol/water	: 2.64
DECOMPOSITION TEMPERATURE	: Not available

---

**10. STABILITY AND REACTIVITY**

REACTIVITY	: Stable under recommended conditions.
CHEMICAL STABILITY	: Degenerated by sunlight.
CONDITION TO AVOID	: Sunlight, heat, oxidizers, metals
INCOMPATIBLE MATERIALS	: Light metals(sodium, potassium, magnesium, barium)
HAZARDOUS DECOMPOSITION PRODUCTS	: CO, CO <sub>2</sub> , fluorine compounds

---

**11. TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY-inhalation	: rat, LC50=8000ppm/4hr
SKIN CORROSION/IRRITATION	: rabbit, 4mg mild irritant
EYE DAMAGE/EYE IRRITATION	: human, severe(HSDB(2005)); rabbit, 2200ug/g(30sec), mild
GERM CELL MUTAGENICITY	: No data available
CARCINOGENICITY	: NTP : R(NTPRoC(11th,2005)) IARC : 2B(IARC71(1999)) EPA : B2(IRIS(2000)) ACGIH : A2
REPRODUCTIVE TOXICITY	: Effect to rat (CERI/NITE(2006), ATSDR(2005))
SPECIFIC TARGET ORGAN TOXICITY	: Human: effect to nervous system, kidneys, liver(CERI/NITE,2006)
ASPIRATION TOXICITY	: No data available

---

12. ECOLOGICAL INFORMATION

ECOTOXICITY : ErC50 (Pseudokirchneriella subcapitata):0.46mg/L/72hr  
BIODEGRADABILITY : This material is not biodegradable. BOD=0%  
BIOACCUMULATION POTENTIAL : This material is not or low bioaccumulatable.  
BCF=3.2 - 7.4(10µg/L), 3.8 – 11.0(1.0µg/L)  
MOBILITY IN SOIL : No data available  
OTHER ADVERSE EFFECTS : Listed in Montreal Protocol list, ANNEX B Group II.  
ODP=1.1, GWP=0.34 - 0.35

---

## 13. DISPOSAL INFORMATION

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

---

## 14. TRANSPORT INFORMATION

IATA  
UN NUMBER : 1846  
UN PROPER SHIPPING NAME : Carbontetrachloride  
CLASS or DIVISION : 6.1  
PACKING GROUP : II  
ADR/RID : 1846, Carbontetrachloride  
DOT : 1846, Carbontetrachloride  
MARINE POLLUTANT : Classified

---

## 15. REGULATORY INFORMATION

US REGULATIONS : Labeling according to US Directives; See section 2  
EU REGULATIONS : Labeling according to EC Directives; See section 2

---

## 16. OTHER INFORMATION

## NOTICE:

The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

## Attention:

This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.