

SAFETY DATA SHEET

SDS No.1021-34029

Revised Date May 30, 2014

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Heptachlor
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. : 1021-34029
SDS No. : 1021-34029
Research use only.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Acute toxicity - oral : Category 3
Acute toxicity – dermal : Category 2
Carcinogenicity : Category 2
Reproductive toxicity : Category 1B
Specific target organ toxicity (single exposure) : Category 1 <liver, nervous system>
Specific target organ toxicity (repeated exposure) : Category 1 <liver, nervous system, kidney>
Hazardous to the aquatic environment –acute hazard : Category 1
Hazardous to the aquatic environment –chronic hazard : Category 1

HAZARDS SYMBOL :



SIGNAL WORD : Danger

HAZARD STATEMENT :

H301 Toxic if swallowed
H310 Fatal in contact with skin
H351 Suspected of causing cancer
H360 May damage fertility or the unborn child
H370 Causes damage to organs<liver, nervous system>
H372 Causes damage to organs through prolonged or repeated exposure<liver, nervous system, kidney>
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS :

P202 Do not handle until all safety precautions have been read and understood.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/eye protection.
P260 Do not breathing gas/mist/vapours.
P273 Avoid release to the environment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of water.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
P308+P313 IF exposed or concerned: Get medical advice/attention.
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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	: Heptachlor
SYNONYMS	: 1,4,5,6,7,8,8-Heptachlor-3a,4,7,7a-tetrahydro-4,7-methanoindene
CHEMICAL FORMULA	: C ₁₀ H ₅ Cl ₇
CONTENT	: > 98 %
CAS No.	: 76-44-8
TSCA INVENTORY	: Listed
EINECS No.	: 200-962-3
EC INDEX No.	: 602-046-00-2

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. Give plenty of water to induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician immediately.

5. FIRE FIGHTING MEASURES

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

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	: Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
ENVIRONMENTAL PRECAUTIONS	: 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 material with suitable protection. After this product, dispose of contents/container in accordance with all applicable regulations and appropriate ways.
STORAGE	: Store away from sunlight in well-ventilated place at 2 - 10°C. Keep container tightly closed.
INCOMPATIBLE PRODUCTS	: Oxidizers, acids, bases

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) ; Recommended
PERSONAL PROTECTION	
RESPIRATORY PROTECTION	: Use respirators approved under appropriate government standards and follow all regulations.
HAND PROTECTION	: Chemical resistant gloves
EYE PROTECTION	: Safety glasses(goggles)
SKIN PROTECTION	: Protective clothing
CONTROL PARAMETERS	
OSHA	: 0.5mg/m3(skin)
NIOSH REL	: 0.5mg/m3(skin)
ACGIH	: 0.05mg/m3(skin)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	: Colorless or white
SHAPE	: Solid
ODOR	: Characteristics odor
pH	: No data available
BOILING POINT	: 95~96°C
MELTING POINT	: 134~135°C
FLASH POINT	: No data available
FLAMMABILITY	: No data available
AUTOIGNITION TEMPERATURE	: No data available
VAPOR PRESSURE	: 0.05Pa (25°C)
VAPOR DENSITY	: No data available
DENSITY	: 1.66g/cm3
SOLUBILITY IN	
WATER	: Practically insoluble
Organic solvent	: Very soluble
DECOMPOSITION TEMPERATURE	: No data available

10. STABILITY AND REACTIVITY

REACTIVITY	: Stable under recommended storage conditions.
CHEMICAL STABILITY	: Very toxic and corrosive gases are emitted by heating. Reacts with oxidants, acids, bases.
CONDITION TO AVOID	: Heat, contact with incompatible materials.
INCOMPATIBLE MATERIALS	: Oxidizers, acids, bases
HAZARDOUS DECOMPOSITION PRODUCTS	: CO, CO2, Hydrogen chloride, Chlorine

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (oral)	: Rat LD50= 59.7 mg/kg (calculated)(PATY 4th(1994),EHC 38(1984),IARC 79(2001),ATSDR(2005))
ACUTE TOXICITY (dermal)	: Rabbit LD50= 119 mg/kg (minimum)(PATY 4th(1994),EHC 38(1984), ATSDR(2005))
SKIN CORROSION/IRRITATION	: Negative (PATY(4th,1994))
EYE DAMAGE/EYE IRRITATION	: No data available
GERM CELL MUTAGENICITY	: Negative (IARC 79(2001),ACGIH(7th,2001),ATSDR(2005))
CARCINOGENICITY	: Classified at EPA: B2(1993), IARC: 2B(2001), ACGIH: A3(2001), EU: 3(2006).
REPRODUCTIVE TOXICITY	: rat, mouse: effect to such as increasing death rate. (ACGIH(7th,2001),EHC 38(1984),IARC 79(2001),ATSDR(2005),PATY(4th, 1994)).
SPECIFIC TARGET ORGAN TOXICITY-single exposure	: Effect to nervous system, damage to liver (PATY(4th,1994),ATSDR(2005)).
SPECIFIC TARGET ORGAN TOXICITY-repeated exposure	: Effect to liver, kidney. (ACGIH(7th,2001),ATSDR(2005),EHC 38(1984),PATY(4th,1994))
ASPIRATION TOXICITY	: No data available

12. ECOLOGICAL INFORMATION

ECOTOXICITY : Crustacean (shrimp pink): EC50=0.03µg/L/96hr
BIODEGRADABILITY : BOD = 0%
BIOACCUMULATION POTENTIAL : log Pow=5.50, BCF = 17,300
MOBILITY IN SOIL : No data available
OTHER ADVERSE EFFECTS : Not listed in Montreal Protocol list.

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 : UN 2761
UN PROPER SHIPPING NAME : Organochlorine pesticides, solid, toxic. (Heptachlor)
CLASS or DIVISION : Toxic (Class 6.1)
PACKING GROUP : II

DOT

IDENTIFICATION NUMBER : UN 2761
PROPER SHIPPING NAME : Organochlorine pesticides, solid, toxic. (Heptachlor)
HAZARD CLASS : Toxic (Class 6.1)
MARINE POLLUTANT : Yes

15. REGULATORY INFORMATION

US REGULATIONS : Labeling according to US regulations; 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.