# SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : 1,2,3-Trichlorobenzene

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. : 1021-21005 SDS No. : 1021-21005

Research use only.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Acute toxicity-Oral : Category 4

Eye damage/eye irritation : Category 2B

Specific target organ toxicity - single exposure -

: Category 2 < digestive system>

Specific target organ toxicity - single exposure -

: Category 3 < Respiratory irritation >

Specific target organ toxicity - repeated exposure -

: Category 2 < liver, thyroid gland>

HAZARDS SYMBOL



SIGNAL WORD : Warning

HAZARD STATEMENTS

H302 Harmful if swallowed H320 Causes eye irritation

H371 May cause damage to organs <digestive system>

H335 May cause respiratory irritation

H373 May cause damage to organs through prolonged or repeated exposure < liver,

thyroid>

PRECAUTIONARY STATEMENTS:

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.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/if you feel unwell.

P330 Rinse mouth.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove co

ntact lenses, if present and easy to do. Continue rinsing.

P337+P313 IF eye irritation persists: Get medical advice/attention.

P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P314 Get medical attention if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with all applicable regulations.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY : 1,2,3-Trichlorobenzene

CHEMICAL FOMULA C6H3Cl3 CONTENT : > 99% MOLECULAR WEIGHT 181.5 CAS No. 87-61-6 **TSCA INVENTRY** Listed EINECS No. 201-757-1 EC INDEX No. Not established

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.

: Move victim to fresh air. If breathing is difficult, give oxygen. If irritation INHALATION

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** : Carbon dioxide, dry chemical powder, foam, water spray

FIRE & EXPLOSION HAZARDS Toxic, irritating, fumes or smoke 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. Pull all wastes in a plastic bag for disposal and seal it tightly. Then, wash the spill site with soap and water and ventilate the area. 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 product 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 cool place.

Keep container tightly closed.

**INCOMOPATIBLE PRODUCTS** : Oxidizers

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

RESPRATORY 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** : Not established **ACGIH** : Not established PRODUCT NAME : 1,2,3-Trichlorobenzene

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : White∼light brown

SHAPE : Solid

**ODOR** Stinking odor No data available pН **BOILING POINT** 220 degree C **MELTING POINT** 51-55 degree C **FLASH POINT** 113 degree C **FLAMMABILITY** : No data available **AUTOIGNITION TEMPERATURE** : No data available VAPOR PRESSURE No data available : No data available VAPOR DENCITY

SPECIFIC GRAVITY : 1.69

**SOLUBILITY IN** 

Water : Insoluble

Organic solvent : Soluble in acetone, ethanol

**DECOMPOSITION TEMPERATURE** 

: No data available

10. STABILITY AND REACTIVITY

REACTIVITY : Stable under recommended storage conditions.
CHEMICAL STABILITY : Degenerated by sunlight. Decompose on burning.

CONDITION TO AVOID : Sunlight, oxidizers INCOMPATIBILE MATERIALS : Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS

: CO, CO2, chlorine compounds

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : Rat:LD50=1830, >5000, 756mg/kg (DFGOT vol.3(1992), HSDB(2004))

SKIN CORROSION/IRRITATION : No data available

EYE DAMAGE/EYE IRRITATION : Human: Eye irritation (3-5ppm)

GERM CELL MUTAGENICITY : Lack of data

CARCINOGENICITY : No data available

REPRODUCTIVE TOXICITY : Lack of data

SPECIFIC TARGET ORGAN TOXICITY - single exposure -

: Human: damage to respiratory system (HSDB,2004)

SPECIFIC TARGET ORGAN TOXICITY - repeated exposure -

Rat: damage to liver, kidneys (PATTY(5th,2001), CaPSAR(1993))

ASPIRATION TOXICITY : No data available

12. ECOLOGICAL INFORMATION

ECOTOXICITY : Fish : LC50=3.22mg/L/96hr

BIODEGRADABILITY : There is no rapidly biodegradability.

BIOACCUMULATION POTENTIAL: Bioaccumulation of this chemical may occur in fish.

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 : 3077

UN PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.

(1,2,3-Trichlorobenzene)

CLASS or DIVISION : 9
PACKING GROUP : III

PRODUCT NAME : 1,2,3-Trichlorobenzene

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ADR/RID : 3077, Environmentally hazardous substances, solid, n.o.s. DOT : 3077, Environmentally hazardous substances, solid, n.o.s.

MARINE POLLUTANT : Yes

15. REGULATORY INFORMATION

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