

SAFETY DATA SHEET

SDS No.5040-0007

Revised Date November 14, 2017 1/4 page

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : IPCC-MS3
NAME OF SUPPLIER : 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. : 5040-31700, 5040-31701
SDS No. : 5040-0007
Research use only.

2. HAZARDS IDENTIFICATION

GHS CLACCIFICATION : Corrosive to Metals : Category 1
Skin corrosion/irritation : Category 1B
Eye damage/eye irritation : Category 1

HAZARDS SYMBOL :



SIGNAL WORD : Danger

HAZARD STATEMENTS :

H290 : May be corrosive to metals
H314 : Causes severe skin burns and eye damage
H318 : Causes serious eye damage

PRECAUTIONARY STATEMENTS :

P234 : Keep only in original container.
P260 : Do not breathe dust or mist.
P264 : Wash hands and eyes thoroughly after handling.
P280 : Wear eye protection or face protection.
P301+P330+P331 : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P363 : Wash contaminated clothing before reuse.
P304+P340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 : Immediately call a POISON CENTER or doctor.
P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P390 : Absorb spillage to prevent material damage.
P405 : Store locked up.
P406 : Store in corrosive resistant container or anything with a resistant inner liner.
P501 : Dispose of contents/container in accordance with all applicable regulations.

MOST IMPORTANT HAZARDS : No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY : Heptafluorobutyric Acid
SYNONYMS : HFBA, Perfluorobutyric Acid, Butanoic acid, heptafluoro-
CONTENT : > 99.0%(T)
CHEMICAL FORMULA : CF3CF2CF2COOH
MOLECULAR WEIGHT : 214.04
CAS No. : 375-22-4
TSCA INVENTORY : Listed
EINECS No. : 206-786-3
EC INDEX No. : Not listed

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.
Consult a physician immediately.
- SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. Consult a physician immediately.
- 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. Consult a physician immediately.
- INGESTION : Rinse mouth, give plenty of water to dilute the substance. Do not 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 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 : 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. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). Then, 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.
- STORAGE : Store away from sunlight in well-ventilated dry place at room temperature.
Keep container tightly closed.
- INCOMPATIBLE PRODUCTS : Oxidizers, strong acids and strong 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 : Half or full face piece respirator, self-contained breathing apparatus, supplied air respirator, etc. 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 PEL : Not established
 - NIOSH REL : Not established
 - ACGIH : Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	: Colorless - Almost colorless
SHAPE	: Liquid
ODOR	: Characteristic odor, Stench
pH	: No data available
BOILING POINT	: 120 degree C
MELTING POINT	: -20 to -17.5 degree C
FLASH POINT	: No data available
FLAMMABILITY	: No data available
AUTOIGNITION TEMPERATURE	: No data available
VAPOR PRESSURE	: 1.3 kPa (20 degree C)
SPECIFIC GRAVITY	: 7.0
DENSITY	: 1.66
SOLUBILITY IN	
Water	: miscible
Organic solvent	: soluble in ether, toluene
DECOMPOSITION TEMPERATURE	: No data available

10. STABILITY AND REACTIVITY

REACTIVITY	: React with bases, acids, oxidizers, reducers, metals.
CHEMICAL STABILITY	: Degenerated by sunlight.
CONDITION TO AVOID	: Sunlight, heat, bases, acids, oxidizers, reducers, metals
INCOMPATIBLE MATERIALS	: Strong oxidizers, acids, bases, reducers and metals
HAZARDOUS DECOMPOSITION PRODUCTS	: CO, CO ₂ , hydrogen fluoride, fluorine compounds

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	: mouse(ipr) LD50=68μL/kg(RTECS) rabbit(ivn) LD50 > 10μL/kg(RTECS)
SKIN CORROSION/IRRITATION	: No data available
EYE DAMAGE/EYE IRRITATION	: No data available
GERM CELL MUTAGENICITY	: No data available
TOXIC TO REPRODUCTION	: No data available
CARCINOGENICITY	: No data available
REPRODUCTIVE TOXICITY	: No data available
SPECIFIC TARGET ORGAN TOXICITY	: No data available
ASPIRATION TOXICITY	: No data available
ADDITIONAL INFORMATION	
NTP	: Not listed
IARC	: Not listed
OSHA	: Not listed
ACGIH	: Not listed
OTHER INFORMATION	: RTECS No. ET4025000

12. ECOLOGICAL INFORMATION

ECOTOXICITY	: No data available
BIODEGRADABILITY	: No data available
BIOACCUMULATION POTENTIAL	: No data available
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 : 3265
UN PROPER SHIPPING NAME : Corrosive liquid, acidic, organic, n.o.s., Heptafluorobutyric Acid
CLASS or DIVISION : 8, Corrosive
PACKING GROUP : II
ADR/RID : 3265, Corrosive liquid, acidic, organic, n.o.s.
DOT : 3265, Corrosive liquid, acidic, organic, n.o.s.
MARINE POLLUTANT : Not classified

15. REGULATORY INFORMATION

US REGULATIONS : Labeling according to EC 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.