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MADRAS FLUORINE PRIVATE LTD

Safety Data Sheet

HEXA FLUOROPHOSPHORIC ACID

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
Product Name	: Hexafluorophosphoric Acid	
Synonyms	: Hydrogen Hexafluorophosphate	
Uses	: Laboratory chemicals, Manufacture of substances	
Contact Information	**OFFICE :** **Madras Fluorine Private Ltd** No.71, 4th Main Road Gandhi Nagar, Adyar Chennai 600 020, India E-mail : exim@mfplfluorine.com	**FACTORY** **Madras Fluorine Private Ltd** Express Highway Manali Chennai – 600 068, India
Emergency Telephone No:	**+91 44 2442 6830 / 2442 0654** **MON – FRI : 9.30 AM – 6.00 PM**	**MON – SAT : 9.00 AM – 5.30 PM**

SECTION 2 : HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Corrosive to metals (Category 1), H290
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 1), H310
Skin corrosion (Category 1A), H314
For the full text of the H-Statements mentioned in this Section, see Section 16.

Label elements
Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)
H290 May be corrosive to metals.
H300 + H310 Fatal if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.

Precautionary statement(s)
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/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.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
Supplemental Hazard information (EU)
EUH014 Reacts violently with water.

Hazard statement(s)
H290 May be corrosive to metals.
H300 + H310 Fatal if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.

Precautionary statement(s)
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/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.
Supplemental Hazard information (EU)
EUH014 Reacts violently with water.

Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Reacts violently with water.
Strong hydrogen fluoride-releaser

SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS

CAS #	Chemical Name	Percent	EINECS / ELINCS
16940-81-1	Hexafluorophosphoric Acid	60	241-006-5
7732-18-5	Water	40	231-791-2

SECTION 4 : FIRST AID MEASURES

Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Hydrofluoric (HF) acid burns require immediate and specialized first aid a hours depending on the concentration of HF. After decontamination with wa penetration/absorption of the fluoride ion. Treatment should be directed exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel exposures may require subcutaneous calcium gluconate except for digital a technique, due to the potential for tissue injury from increased pressure and should be considered when undergoing decontamination. Prevention of a obtained by giving milk, chewable calcium carbonate tablets or Milk of Ma hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. First treatment with calcium gluconate paste.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5 : FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media
Dry powder

Special hazards arising from the substance or mixture
No data available

Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush with water. Keep in suitable, closed containers for disposal.

SECTION 7 : HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Never allow product to get in contact with water during storage.
Recommended storage temperature 2 - 8 °C

Do not store in glass
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

Specific end use(s)
Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits :

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Hexafluorophosphoric Acid	none listed	none listed	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Hexafluorophosphoric Acid: No OSHA Vacated PELs are listed for this chemical. Water: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Liquid
Appearance	:	clear, liquid Colour: light brown
Odor	:	None reported.
pH	:	Not available.
Vapor Pressure	:	Not available.
Vapor Density	:	5.0
Evaporation Rate	:	Not available.
Viscosity	:	Not available.
Boiling Point	:	Not available.
Freezing/Melting Point	:	31 deg C
Decomposition Temperature	:	Not available.
Solubility	:	hydrolyzes slowly
Specific Gravity/Density	:	1.6510g/cm3
Molecular Formula	:	HF6P
Molecular Weight	:	145.97

SECTION 10 : STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Reacts violently with water.

Conditions to avoid
Exposure to moisture Reacts dangerously with glass.

Incompatible materials
Strong bases, glass, Alkali metals, Powdered metals, Strong oxidizing agents, Metals, Reacts violently with water.glass

SECTION 11 : TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrofluoric acid)
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Difluorophosphoric acid)

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
RTECS: Not available
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia.

SECTION 12 : ECOLOGICAL INFORMATION

Toxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects
No data available

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product.

SECTION 14 : TRANSPORT INFORMATION

UN number
ADR/RID: 1782 IMDG: 1782 IATA: 1782

UN proper shipping name
ADR/RID: HEXAFLUOROPHOSPHORIC ACID
IMDG: HEXAFLUOROPHOSPHORIC ACID
IATA: HEXAFLUOROPHOSPHORIC ACID

Transport hazard class(es)
ADR/RID: 8 IMDG: 8 IATA: 8

Packaging group
ADR/RID: II IMDG: II IATA: II

Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16 : OTHER INFORMATION

Creation Date : 18.9.2000

Disclaimer:

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REVISION : 4 **22/05/2019**