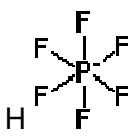


NAVIN FLUORINE INTERNATIONAL LTD		web: <a href="http://www.nfil.in">http://www.nfil.in</a> mailto: <a href="mailto:speciality@nfil.in">speciality@nfil.in</a>
		2nd Floor, Suntek Centre, 37/40, Subhash Road, Vile Parle (East), Mumbai-400057. India.

PRODUCT SPECIFICATION	
Title: HEXAFLUORO PHOSPHORIC ACID (HPF <sub>6</sub> )	Document No. : NFIL/QC /SPEC/FP/039/00 Effective Date : 05/11/2008

Material Code	: SPE005013,HPF605001
Packing	: 40 kg or UN-Certified MS- HDPE drum 200/250Kg
Packing/storage Specifications	: Stored in dry condition at room temperature in well closed container.
Structural Formula	: 
Molecular Formula	: HF6P
Molecular Weight	: 144.97
Synonyms	: Hydrogen Hexafluorophosphate

Sr. No.	TEST	SPECIFICATION
<b>Product Specification:</b>		
1	Appearance/Description	Colourless to slight Greenish fuming liquid become hazy on storage
2	Sp. Gr. at R.T.	1.60 to 1.80
3	Purity as HPF <sub>6</sub>	60.00 % Min.
4	Moisture (By KF)	40.00% Max.

- Customer should discuss with business unit at [bulkfluoride@nfil.in](mailto:bulkfluoride@nfil.in) for the other requirements than specified.
- Analytical Method No. **NFIL/QC/WI/FP/039**

***Hexafluorophosphoric acid***

<b>1</b>	<b>CHEMICAL IDENTITY</b>		Hexafluorophosphoric acid, 60 wt.% solution in water	
	Chemical Name		Hexafluorophosphoric acid	
	Synonym		Hydrogen hexafluoro phosphate	
	Formula		HPF <sub>6</sub>	
<b>2</b>	<b>COMPOSITION / INFORMATION ON INGREDIENTS</b>			
	Ingredients name & CAS no.: Phosphoric acid-7664-38-2, Hydrogen fluoride-7664-39-3, Water-7732-18-5, Mono fluorophosphoric acid- 13537-32-1, Difluorophosphoric acid-13779-41-4, Hexafluorophosphoric acid, 60%-16940-81-1.EC No.241-006-5			
<b>3</b>	<b>PHYSICAL / CHEMICAL DATA</b>			
	Boiling Point, °C	Not available	Vapour Pressure @20 °C	Not Available
	Melting Point, °C	10°C	Solubility in water, at 25 °C	Hydrolyzes slowly
	Vapour Density, (Air = 1)	Not Available	Appearance	Colorless-light colored
	Specific Gravity (Water = 1) at 20°Cg/cm <sup>3</sup>	1.651	Odour	NA
	pH (5% Soln.)	acidic	Other	----
	Physical state	Liquid		
<b>4</b>	<b>FIRE / EXPLOSION HAZARD DATA</b>			
	Flammability NO	LEL%	Not Available	Flash Point °C Not Available
	Auto Ignition Temp. °C, Available	Not	UEL%	Not Available
	TDG Flammability	NA		
	Explosion Sensitivity to Impact	NA		
	Explosion Sensitivity to static electricity	NA		
	Hazardous Combustion Product	Oxides of phosphorus, hydrogen fluoride gas, phosphine.		
	Hazardous Polymerization	Has not been reported.		
	Combustible liquid	NO	Oxidizer	NO
	Flammable material	NO	Organic Peroxide	NO
	Pyrophoric material	NO	Corrosive	YES
	Explosive material	NO	Other	
<b>5</b>	<b>STABILITY &amp; REACTIVITY DATA</b>			
	Chemical stability	Stable under normal temperatures and pressures		
	Incompatibility	Strong bases, glass, strong acids, oxidizing agents.		
	Reactivity	In presence of moisture it will corrode glass, cement and most metals		
	Hazardous Reaction products	Emits toxic fumes F, Nox and NH <sub>3</sub> . Upon contact with moisture & metal, this material may release hydrogen gas.		
<b>6</b>	<b>HEALTH HAZARD DATA</b>			
	Route of entry	Skin, Eyes, Inhalation, Ingestion		
	Effects of exposure/ Symptoms	<b>Skin:</b> causes skin burns. Toxic in contact with skin. <b>Eyes:</b> causes eye burns. May cause blindness. <b>Inhalation:</b> May be fatal if inhaled. Causes chemical burns to the respiratory tract. Toxic if inhaled. Inhalation may produce burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. <b>Ingestion:</b> Causes gastrointestinal tract burns. Toxic if swallowed.		
	Emergency Treatment	Remove the victim into fresh air. If breath stopped apply artificial respiration. get immediate medical attention.		

<b>7</b>	<b>TOXICOLOGICAL INFORMATION</b>		
	LD 50 / LC50	CAS# 7664-38-2: Draize test, rabbit, eye: 119 mg Severe; Draize test, rabbit, skin: 595 mg/24H Severe; Inhalation, mouse: LC50 = 25.5 mg/m <sup>3</sup> ; Inhalation, rat: LC50 = >850 mg/m <sup>3</sup> /1H; Inhalation, rat: LC50 = 25.5 mg/m <sup>3</sup> ; Oral, mouse: LD50 = 1.25 gm/kg; Oral, rat: LD50 = 1530 mg/kg; Oral, rat: LD50 = 1.25 gm/kg; Skin, rabbit: LD50 = 2740 mg/kg. CAS# 7664-39-3: Inhalation, mouse: LC50 = 342 ppm/1H; Inhalation, mouse: LC50 = 5000 mg/m <sup>3</sup> /5M; Inhalation, mouse: LC50 = 270 mg/m <sup>3</sup> /60M; Inhalation, rat: LC50 = 1276 ppm/1H; Inhalation, rat: LC50 = 1100 mg/m <sup>3</sup> /60M. CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.	
	Permissible Exposure Limit-OSHA	NA	
<b>8</b>	<b>ECOLOGICAL INFORMATION: NA</b>		
<b>9</b>	<b>PREVENTIVE MEASURES/EXPOSURE CONTROL/PERSONAL PROTECTION</b>		
	Engineering Controls	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.	
	Personal Protective Equipments	Use PVC or neoprene rubber gloves, self contained breathing apparatus, safety goggles, rubber boot, full protective clothing	
<b>10</b>	<b>HANDLING &amp; STORAGE</b>		
	Normal Handling	Do not breathe dust, vapor, mist or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.	
	Storage Recommendation	Store in cool, dry place. Store in tightly closed container. Corrosives area.	
<b>11</b>	<b>EMERGENCY / FIRST AID MEASURE</b>		
	FIRE	Fire extinguishing medium	Use water spray, dry chemical, carbon dioxide, or chemical foam.
	EXPOSURE	Inhalation	Get medical aid immediately . Remove from exposure and move to fresh air immediately. Wash mouth out with water.
	First Aid Measures	Skin / eyes	Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes eyes and skin with running water at least 15 minutes. Removing contaminated clothing and get medical aid.
		Ingestion	Do NOT induce vomiting. Get medical aid immediately. Wash mouth with water.
	Special procedure	Use NIOSH approved self contained positive pressure breathing apparatus with full face piece and protective clothing.	
<b>12</b>	<b>ACCIDENTAL RELEASE MEASURES</b>		
	General Information	Use proper personal protective equipment as indicated in Section 9.	
	Spills / Release	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.	
<b>13</b>	<b>DISPOSAL CONSIDERAIONS:</b> Disposal of in a manner consistent with federal, state & local regulations. Users of this product should review their operations in terms of applicable Federal, State & local laws and regulations, then consult with appropriate regulatory agencies before discharging or disposing of waste material.		
<b>14</b>	<b>TRANSPORT INFORMATION</b>		
	HEXAFLUOROPHOSPHORIC ACID, CLASS 8, UN 1782, Packing group-II. Hazard Lable: 		

<b>15</b>	<b>REGULATORY INFORMATION: Federal, state &amp; International Regulations</b>
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<b>16</b>	<b>NAME OF FIRM</b>	<b>NAVIN FLUORINE INTERNATIONAL LIMITED</b>
	Mailing address	Post Office - Bhestan, Surat PIN 395 023, Gujarat, India
	Telephone	+91-261-2890325 to 2890329
	Fax	+91-261-2890288
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