

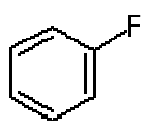
NAVIN FLUORINE INTERNATIONAL LTD		web: http://www.nfil.in mailto: speciality@nfil.in
		2nd Floor, Sunteck Centre, 37/40, Subash Road, Vile Parle (East), Mumbai-400057. India.

PRODUCT SPECIFICATION	
Title: FLUOROBENZENE (C ₆ H ₅ F)	Document No. : NFIL/QC /SPEC/FP/001/00 Effective Date : 05/11/2008

Material Code : SPE005208

Major Packing : UN-Certified /MS-HDPE drum 200 / 250Kg & ISO Container

Storage Specifications : Stored in dry condition at room temperature in well closed container.

Structural Formula : 

Molecular Formula : C₆H₅F

Molecular Weight : 96.10

Synonyms : Monofluorobenzene, Phenyl Fluoride

Sr. No.	TEST	SPECIFICATION
Product Specification:		
1	Appearance / Description	Clear, colourless liquid
2	Purity (By GC)	99.60% Min.
3	Moisture (By KF)	00.05% Max.
4	Total Impurities	00.40% Max.

- Customer should discuss with business unit at speciality@nfil.in for the other requirements than specified.
- Analytical Method No. **NFIL/QC/WI/FP/001**

Fluorobenzene (99%)

1. CHEMICAL IDENTITY

Chemical Name	Fluorobenzene
Synonym	-
Formula	C ₆ H ₅ F

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients name - Fluorobenzene	C.A.S. No 462-06-6 ECNo: 207-321-7
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3. PHYSICAL / CHEMICAL DATA

Boiling Point	84.73 deg C 760mm Hg	Vapour Pressure at 65.7deg C	400 mmHg
Melting Point	-40 deg C	Solubility in water	1.54gper lit at 20°C
Vapour Density (Air = 1)	3.31	Appearance	Clear Colourless
Specific Gravity (Water=1)	1.024	Odour	Benzene like
pH (5% Soln.)	Not available	Other	----
Physical state	liquid		

4. FIRE / EXPLOSION HAZARD DATA

Flammability	LEL%	Not available	Flash Point : -15 deg C
Auto Ignition Temp. Not available	UEL%	Not available	
Explosion Sensitivity to Impact	Stable		
Explosion Sensitivity to static electricity	Stable		
Hazardous Combustion Product	Carbon monoxide, carbon dioxide, hydrogen fluoride gas.		
Hazardous Polymerization	Has not been reported		
Combustible liquid	No	Oxidizer	No
Flammable material	Yes	Organic Peroxide	No
Pyrophoric material	No	Corrosive	No
Explosive material	No	Other	

5. STABILITY & REACTIVITY DATA

Chemical stability	Stable under normal temperature and pressure
Incompatibility	Oxidizing Agent
Conditions to avoid	Incompatible materials, ignition sources, dust generation, excess heat, electrical sparks, exposure to flame.
Hazardous reaction/decomposition products	Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, hydrogen fluoride gas.

6. HEALTH HAZARD DATA

Effects of exposure/ Symptoms	Skin, Eyes, Inhalation ,Ingestion Eye: May cause eye irritation. Skin: May cause skin irritation. Prolonged and/or repeated contact may cause deflating of the skin and dermatitis. Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inhalation: May cause respiratory tract irritation. Vapors may cause dizziness or suffocation. Chronic: Chronic exposure may cause lung damage.
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7. TOXICOLOGICAL INFORMATION


LD 50 / LC50	Inhalation LC50(rat): 26908 mg/m3 Oral LD50(rat): 4399 mg / kg Inhalation LC50(mouse): 45000 mg /m3 / 2H
Permissible Exposure Limit-OSHA(PEL)	None listed
NFPA hazard signal (estimated)	Health-1, Flammability-3, Reactivity-0

8. ECOLOGICAL INFORMATION		
No information available		
9. PREVENTIVE MEASURES/EXPOSURE CONTROL/PERSONAL PROTECTION		
Engineering Controls	Use adequate ventilation to keep airborne concentrations low.	
Personal Protective Equipments	Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective gloves and clothing to prevent skin exposure. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.	
10. HANDLING & STORAGE		
Normal Handling	Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.	
Storage Recommendation	Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.	
11. EMERGENCY / FIRST AID MEASURE		
Fire	Fire extinguishing medium	For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Use agent most appropriate to extinguish fire. Do NOT use straight streams of water.
Exposure/first aid measures	Inhalation	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid
	Skin / Eyes	Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Remove contaminated clothing and shoes.
	Ingestion	If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately
Special procedure	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA / NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Extremely flammable liquid and vapor. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Will be easily ignited by heat, sparks or flame.	
12. ACCIDENTAL RELEASE MEASURES		
General Information	Use proper personal protective equipment as indicated in section 9	
Spills / Release	Shut off leaks if without risk. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.	

13. DISPOSAL CONSIDERAIONS

Dispose of in a manner consistent with federal, state, and local regulations.

14. TRANSPORT INFORMATION

	US (DOT)	Canada (TDG)
Shipping Name	FLUOROBENZENE	FLUOROBENZENE
Hazard Class	3	3
UN Number	2387	2387
Packing Group	II	II
Hazard Class label		

15. REGULATORY INFORMATION

Federal, state & International Regulations.

16. NAME OF FIRM - NAVIN FLUORINE INTERNATIONAL LIMITED

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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