

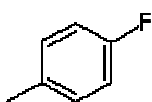
NAVIN FLUORINE INTERNATIONAL LTD		web: http://www.nfil.in mailto: speciality@nfil.in
		2nd Floor, Suntek Centre, 37/40, Subhash Road, Vile Parle (East), Mumbai-400057. India.

PRODUCT SPECIFICATION	
Title: PARA FLUORO TOLUENE (C ₇ H ₇ F)	Document No. : NFIL/QC /SPEC/FP/004/00 Effective Date : 05/11/2008

Material Code : SPE005051

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

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

Structural Formula : 

Molecular Formula : C₇H₇F

Molecular Weight : 110.13

Synonyms : p-Fluoro Toluene, 1-Fluoro-4-Methyl Benzene

Sr. No.	TEST	SPECIFICATION
Product Specification:		
1	Appearance / Description	Clear, colorless liquid
2	Moisture (By KF)	00.10% Max.
3	Purity (By GC)	99.50% Min.
4	Toluene	00.05%Max.
5	Ortho Isomer	00.05% Max.

- Customer should discuss with business unit at speciality@nfil.in for the other requirements than specified.
- Analytical Method No. **NFIL/QC/WI/FP/004**.



NAVIN FLUORINE
INTERNATIONAL LIMITED

MATERIAL SAFETY DATA SHEET (MSDS)

p-Fluorotoluene, 97%

1. CHEMICAL IDENTITY

Chemical Name	p-Fluorotoluene, 97%
Synonym	4-Fluorotoluene
Formula	C ₇ H ₇ F

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients name & CAS no	p-Fluorotoluene C.A.S. No 352-32-9
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3. PHYSICAL / CHEMICAL DATA

Boiling Point °C	116	Vapour Pressure at 20 °C	23 mbar
Melting Point °C	56	Solubility in water	Insoluble
Vapour Density (Air = 1)	3.8	Appearance	Colourless
Specific Gravity (Water=1)	1	Odour	Bitter-almond
pH (5% Soln.)	Not available	Other	----
Physical state	liquid		

4. FIRE / EXPLOSION HAZARD DATA

Flammability	Flammable	LEL%	Not available	Flash Point : 10 °C
Auto Ignition Temp.	Not available	UEL%	Not available	
TDG Flammability		NA		
Explosion Sensitivity to Impact		NA		
Explosion Sensitivity to static electricity		NA		
Hazardous Combustion Product		NA		
Hazardous Polymerization		Has not been reported.		
Combustible liquid	Yes	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	Strong oxidizing agents.
Conditions to avoid	Ignition sources, confined spaces.
Hazardous reaction/decomposition products	Carbon monoxide, carbon dioxide, hydrogen fluoride gas.

6. HEALTH HAZARD DATA

Effects of exposure/ Symptoms	Skin, Eyes, Inhalation ,Ingestion Eye: Cause eye irritation. Skin: Causes skin irritation. May be harmful if absorbed through the skin. Ingestion: Can Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
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7. TOXICOLOGICAL INFORMATION

LD 50 / LC50	Not available.
Permissible Exposure Limit-OSHA(PEL)	None listed
NFPA hazard signal(estimated)	Health-2, Flammability-3, Instability-0

8. ECOLOGICAL INFORMATION		
Ecotoxicity : No data available. No information available.		
9. PREVENTIVE MEASURES/EXPOSURE CONTROL/PERSONAL PROTECTION		
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	Protective gloves, protective goggles, lab coat, respirators.	
10. HANDLING & STORAGE		
Normal Handling	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.	
Storage Recommendation	Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.	
11. EMERGENCY / FIRST AID MEASURE		
Fire	Fire extinguishing media	Use water spray, dry chemical, carbon dioxide, or chemical foam.
Exposure/first aid measures	Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid
	Skin / Eyes	Eye: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid. Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.
	Ingestion	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
	Antidote/Dosage	Calcium gluconate- 2.5% gel, 10 % (10ml) solution.
Special procedure	Use NIOSH approved self contained positive pressure breathing apparatus with full face piece and protective clothing.	
12. ACCIDENTAL RELEASE MEASURES		
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. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.	
13. DISPOSAL CONSIDERAIONS:		
Seal all waste in vapour tight plastic bags. Dispose of in a manner consistent with federal, state, and local regulations.		
14. TRANSPORT INFORMATION		
US DOT, Canada TDG Shipping Name: FLUOROTOLUENES Hazard Class: 3 UN Number: 2388 Packing group: II		
Hazard Label 		
Additional information: FLASH POINT 10 °C		
15. REGULATORY INFORMATION		
European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: XI F Risk Phrases:		

	<p>R 11 Highly flammable. R 36/37/38 Irritating to eyes, respiratory system and skin.</p> <p>Safety Phrases: S 16 Keep away from sources of ignition - No smoking. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37/39 Wear suitable gloves and eye/face protection.</p>	
16. NAME OF FIRM - NAVIN FLUORINE INTERNATIONAL LIMITED		
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