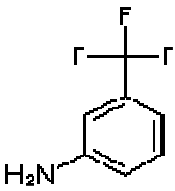


NAVIN FLUORINE INTERNATIONAL LTD		web: http://www.nfil.in mailto: speciality@nfil.in
		2nd Floor, Suntek Centre, 37/40, Subhash Road, Vile Parle (East), Mumbai-400057. India.

PRODUCT SPECIFICATION	
Title: 3-AMINO BENZOTRIFLUORIDE (C ₇ H ₆ F ₃ N)	Document No. : NFIL/QC /SPEC/FP/025/00 Effective Date : 05/11/2008

Material Code	: SPE005101.
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	: CNF6F3N
Molecular Weight	: 161.12
Synonyms	: 3-Trifluoromethylaniline; m-Aminobenzotrifluoride; mTrifluoromethylaniline

Sr. No.	TEST	SPECIFICATION
Product Specification:		
1	Appearance / Description	Clear, colorless to yellow liquid darkens on Storage
2	Purity (By GC)	99.00% Min.
3	Moisture (By KF)	00.20% Max.
4	Ortho isomer	00.20% Max.
5	Para isomer	00.20% Max.
6	Total Impurities	01.00% Max.

- Customer should discuss with business unit at speciality@nfil.in for the other requirements than specified.
- Analytical Method No. **NFIL/QC/WI/FP/025**.



NAVIN FLUORINE
INTERNATIONAL LIMITED

MATERIAL SAFETY DATA SHEET (MSDS)

3-Aminobenzotrifluoride

1. CHEMICAL IDENTITY

Chemical Name	3-Aminobenzotrifluoride
Synonym	3-(trifluoromethyl)aniline
Formula	C7H6F3N

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients name: 3-Aminobenzotrifluoride,	C.A.S. No 98-16-8 EC No:202-643-4
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3. PHYSICAL / CHEMICAL DATA

Boiling Point, °C	187 - 193 °C @760mmHg	Vapour Pr. at 20°C	26.7mbar @ 85°C
Melting Point, °C	5.0-6.0 °C	Solubility in water	5 g/l in water(20°C)
Vapour Density, (Air = 1)	NA	Appearance	Light yellow.
Specific Gravity/Density	1.303 g/cm3	Odour	Stench
pH (5% Soln.)	7.2(5g/l aq. Sol.)	Other	----
Physical state	Clear liquid		

4. FIRE / EXPLOSION HAZARD DATA

Flammability: Yes	LEL%	Not available	Flash Point °C 85 deg C.
Auto Ignition Temperature: > 600°C.	UEL%	Not available	
TDG Flammability	NA		
Explosion Sensitivity to Impact	NA		
Explosion Sensitivity to static electricity	NA		
Hazardous Combustion Product	Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen fluoride gas.		
Hazardous Polymerization	Has not been reported.		
Combustible liquid	NA	Oxidizer	NA
Flammable material	Yes.	Organic Peroxide	NA
Pyrophoric material	NA	Corrosive	NA
Explosive material	NA	Other	

5. STABILITY & REACTIVITY DATA

Chemical stability/	Light sensitive.
Incompatibility	Strong oxidizing agents, acids.
Conditions to avoid	Incompatible materials, light.
Hazardous decomposition products	Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen fluoride gas.

6. HEALTH HAZARD DATA

Route of entry	Skin, Eyes, Inhalation, Ingestion.
Effects of exposure/ Symptoms	Eye: Causes eye irritation. Skin: Causes skin irritation. Harmful if absorbed through the skin. Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). It may cause burning sensations, coughing, wheezing, laryngitis, shortness of breath and headache. Inhalation: May be fatal if inhaled. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Causes respiratory tract irritation. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Chronic: Prolonged exposure may produce a narcotic effect. Prolonged or repeated exposure may cause nausea, dizziness, and headache. There is a danger of cumulative effects

7. TOXICOLOGICAL INFORMATION

	LD 50 / LC50	Draize test, rabbit, eye: 100 uL Moderate; Inhalation, mouse: LC50 = 690 mg/m ³ /2H; Inhalation, rat: LC50 = 440 mg/m ³ /4H; Oral, mouse: LD50 = 220 mg/kg; Oral, rabbit: LD50 = 615 mg/kg; Oral, rat: LD50 = 480 mg/kg; Skin, rabbit: LD50 = 1330 mg/kg.		
	Permissible Exposure Limit-OSHA	NA		
8. ECOLOGICAL INFORMATION:				
	Ecotoxicity: Daphnia: EC50: 6.6 mg/l; 48 h; Bacteria: EC50: >1400 mg/l; OESO 209log POW = 2.39Biodegradation: 74% (28d - OESO 302 B) Other: Avoid entering into waters or underground water. Do not empty into drains.			
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, aprons, respirators.		
10. HANDLING & STORAGE				
	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	Keep away from sources of ignition. Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.		
11. EMERGENCY / FIRST AID MEASURE				
	Fire	Fire extinguishing medium	Use water spray, dry chemical, CO ₂ or chemical foam.	
	Exposure/first aid measures	Inhalation	Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid	
		Eyes/ Skin	Eye: Flush eyes with running water for several minutes, while keeping the eyelids wide open. Skin: Remove contaminated shoes, socks and clothing, wash the affected skin with plenty of water.	
		Ingestion	Get medical aid. Wash mouth out with water.	
	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 / Leaks	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately.		
13. DISPOSAL CONSIDERAIONS:				
	Dispose of in a manner consistent with federal, state, and local regulations.			
14. TRANSPORT INFORMATION				
		IATA	IMO	RID/ADR
	Shipping Name	3-TRIFLUOROMETHYL-ANILINE	3-TRIFLUOROMETHYL-ANILINE	3-TRIFLUOROMETHYL-ANILINE
	Hazard Class	6.1	6.1	6.1
	UN Number	2948	2948	2948
	Packing Group	II	II	II
	Hazard Class Label:			

15. REGULATORY INFORMATION:

European & International Regulations.

Hazard Symbols: T+ N



Risk Phrases:

R21/22 Harmful in contact with skin and if swallowed.

R26 Very toxic by inhalation.

R33 Danger of cumulative effects.

R36/37/38 Irritating to eyes, respiratory system and skin.

R51/53 Toxic to aquatic organisms, may cause long term adverse effect in the aquatic environment.

Safety Phrases:

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28A After contact with skin, wash immediately with plenty of water

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S57 Use appropriate containment to avoid environmental contamination.

S60 This material and its container must be disposed of as hazardous waste.

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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