

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

MSDS Name: 3-(Trifluoromethyl)aniline
Synonyms: 3-Aminobenzotrifluoride
Company Identification: Shanghai PI Chemicals Ltd.
Room 6-306, Building 2
1341 Pudong South Road
Pudong New Area, Shanghai 200212, China
Telephone Number: 86-21-51389368
Fax Number: 86-21-51389367
Emergency Number: 86-21-51389369

Section 2 – Product Information

Catalog Number: PI-31335
CAS #: 98-16-8
Purity: 98.0%
EINECS# 202-643-4

Section 3 – Physical and Chemical Properties

Appearance: Light yellow liquid
Odor: Stench
Molecular Formula: C₇H₆F₃N
Molecular Weight: 161.12
Freezing/Melting Point: 5-6°C
Boiling Point: 183-197°C (760mmHg)
Flash Point: 85°C
Refractive Index (nD20): 1.479-1.481
Density: 1.303g/cm³
Decomposition Temperature: Not available
Solubility: 5g/l in water (20°C)

Section 4 – Hazards Identification

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). May cause burning sensations, coughing, wheezing, laryngitis, shortness of breath and headache.
- Inhalation:** May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Causes respiratory tract irritation. Toxic if inhaled. 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.

Section 5 – First Aid Measures

- Eye:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
- Skin:** Get medical aid. Flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.
- Ingestion:** Get medical aid immediately. Wash mouth out with water.
- 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.

Section 6 – Stability and Reactivity

- Chemical Stability:** Light sensitive.
- Materials to avoid:** Strong oxidizing agents, acids.
- Conditions to Avoid:** Incompatible materials, light.
- Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen fluoride gas.
- Hazardous Polymerization:** Has not been reported.

Section 7 – Handling and Storage

- Handling:** Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required.
- Storage:** Keep away from sources of ignition. Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container. Material darkens in color on storage.

Section 8 – Personal Protection

- 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 prevent skin exposure.

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 – Fire and Explosion Hazard Data

General Information: As in any fire, wear a self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and protective clothing to prevent contact with skin and eyes.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 10 – Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container.

Section 11 – Toxicological Information

RTECS#: CAS# 98-16-8: XU9180000

LD50/LC50: RTECS: CAS# 98-16-8: Draize test, rabbit, eye: 100 uL Moderate;

Inhalation, mouse: LC50 = 690 mg/m³/2H;

Inhalation, rat: LC50 = 440 mg/m³/4H;

Oral, mouse: LD50 = 220 mg/kg;

Oral, rabbit: LD50 = 615 mg/kg;

Oral, rat: LD50 = 480 mg/kg;

Skin, rabbit: LD50 = 1330 mg/kg

Carcinogenicity: 3-(Trifluoromethyl)aniline- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 – Environmental information

Ecotoxicity: Daphnia: Daphnia: EC50: 6.6 mg/l; 48 h.

Others: Avoid entering into waters or underground water. Do not empty into drains.

logPOW = 2.39 Biodegradation: 74% (28d - OESO 302 B)

Section 13 – Disposal Consideration

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

Section 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: | 2489 | 2489 | 2489 |
| Packing Group: | III | III | III |

Section 15 – Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 21/22 Harmful in contact with skin and if swallowed.

R 23 Toxic by inhalation.

R 33 Danger of cumulative effects

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water.

S 36/37/39 Wear suitable gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 98-16-8: 2

Canada

CAS# 98-16-8 is listed on Canada's NDSL List

US Federal

TSCA

CAS# 98-16-8 is listed on the TSCA Inventory.

Section 16 – Additional Information

MSDS Creation Date: 2/22/2007

Update: Original

The above information is believed to be accurate and represents the best knowledge available to us currently. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall PI Chemicals, be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, even if PI Chemicals has been advised of the possibility of such damages.