

# Safety Data Sheet

# FC10-01

# 2-Aminobenzotrifluoride

Revised November 10, 2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Material Identification** 

Product name: 2-Aminobenzotrifluoride

Chemical name: 2-(Trifluoromethyl)aniline

FC10-01 Catalog number:

**Company Identification** 

Distributor: Fluoryx Labs

> 3650 Research Way, #22 Carson City, NV 89706

USA

**Emergency call:** +01-813-248-0585 (International)

+1-800-255-3924 (USA)

## 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H311

Specific target organ toxicity - repeated exposure (Category 2), H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

## GHS Label elements, including precautionary statements

**Pictogram** 

Signal word

**Hazard statement(s)** 

H301 + H311 + H331

H226 Flammable liquid and vapor.

Danger

Toxic if swallowed, in contact with skin or if inhaled

May cause damage to organs through prolonged or

repeated exposure.

H373 May cause damage to organs through prolonged or

repeated exposure.

Precautionary statement(s)

Keep away from heat/sparks/open flames/hot surfaces. P210

- No smoking.

| P233               | Keep container tightly closed.                           |  |  |
|--------------------|--|--|--|
| P240               | Ground/bond container and receiving equipment.           |  |  |
| P241               | Use explosion-proof electrical/ ventilating/ lighting/   |  |  |
|                    | equipment.   |  |  |
| P242               | Use only non-sparking tools.                             |  |  |
| P243               | Take precautionary measures against static discharge.    |  |  |
| P260               | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.    |  |  |
| P264               | Wash skin thoroughly after handling.                     |  |  |
| P270               | Do not eat, drink or smoke when using this product.      |  |  |
| P271               | Use only outdoors or in a well-ventilated area.          |  |  |
| P280               | Wear protective gloves/ protective clothing/ eye         |  |  |
|                    | protection/ face protection.                             |  |  |
| P301 + P310        | IF SWALLOWED: Immediately call a POISON CENTER           |  |  |
|                    | or doctor/physician.                                     |  |  |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all   |  |  |
|                    | contaminated clothing. Rinse skin with water/ shower.    |  |  |
| P304 + P340        | IF INHALED: Remove victim to fresh air and keep at rest  |  |  |
|                    | in a position comfortable for breathing.                 |  |  |
| P314               | Get medical advice/ attention if you feel unwell.        |  |  |
| P322               | Specific measures (see supplemental first aid            |  |  |
|                    | instructions on this label).                             |  |  |
| P330               | Rinse mouth.   |  |  |
| P361               | Remove/Take off immediately all contaminated clothing.   |  |  |
| P363               | Wash contaminated clothing before reuse.                 |  |  |
| P370 + P378        | In case of fire: Use dry sand, dry chemical or           |  |  |
|                    | alcohol-resistant foam for extinction.                   |  |  |
| P403 + P233        | Store in a well-ventilated place. Keep container tightly |  |  |
|                    | closed.  |  |  |
| P403 + P235        | Store in a well-ventilated place. Keep cool.             |  |  |
| P405               | Store locked up.   |  |  |
| P501               | Dispose of contents/ container to an approved waste      |  |  |
|                    | disposal plant.  |  |  |
|                    |  |  |  |

Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION AND INFORMATION ON COMPONENTS

| Material                | Molecular Weight                              | EINECS Number | CAS Number |
|-------------------------|---|---------------|------------|
| 2-Aminobenzotrifluoride | 161.13  | 201-806-7     | 88-17-5    |
| Synonym:                | $\alpha,\alpha,\alpha$ -Trifluoro-o-toluidine |               |            |

**Chemical formula:**  $C_7H_6F_3N$ H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CF<sub>3</sub>

**Hazardous components** 

Component  $\alpha, \alpha, \alpha$ -Trifluoro-*o*-toluidine

Classification Flam. Liq. 3; Acute Tox. 3; STOT RE 2; H226, H301

+H311 + H331, H373

Concentration ≤ 100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4. FIRST AID MEASURES

**Skin Contact:** Get medical aid. Flush skin with plenty of water for at

least 15 minutes while removing contaminated clothing

and shoes. Wash clothing before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least

15 minutes, occasionally lifting the upper and lower

eyelids. Get medical aid.

Never give anything by mouth to an unconscious person. Ingestion:

Get medical aid. Do NOT induce vomiting. If

conscious and alert, rinse mouth and drink 2-4 cupfulls

of milk or 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.

Notes to Physician: Treat symptomatically and supportively. For

methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin

concentration in the blood.

Antidote: Methylene blue, alone or in combination with oxygen is

indicated as a treatment in nitrite induced

methemoglobinemia.

#### 5. FIRE FIGHTING MEASURES

Flash Point: 55 °C (131 °F), closed cup

Auto-Ignition Temperature: > 500 °C (> 932° F)

Suitable Extinguishing Media: For small (incipient) fires, use media such as "alcohol"

foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special hazards arising from the substance Carbon oxides, nitrogen oxides (NOx), Hydrogen

fluoride

Advice for firefighters Wear self-contained breathing apparatus for fire fighting

if necessary.

**Further information**Use water spray to cool unopened containers.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do

not let product enter drains.

Cleanup Procedures: Contain spillage, and then collect with an electrically

protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations

(see section 13).

#### 7. HANDLING AND STORAGE

**Precautions for safe handling**Avoid contact with skin and eyes. Avoid inhalation of

vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to

prevent leakage.

Specific end use(s) Apart from the uses mentioned in section 1.2 no other

specific uses are stipulated.

# 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Limit Values:** United States OSHA: 2.5 mg/m3 TWA (as F) (listed

under Fluorides)

**Exposure Controls:** 

Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands

before breaks and immediately after handling the

product.

Personal protective equipment

Eye/face protection Face shield and safety glasses Use equipment for eye

protection tested and approved under appropriate government standards such as NIOSH (US) or EN

166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to

use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory

practices. Wash and dry hands.

Full contact Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm Break through time: 480 min

Material tested: Vitoject® (KCL 890 / Aldrich Z677698,

Size M)

Splash contact Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm Break through time: 480 min

Material tested: Vitoject® (KCL 890 / Aldrich Z677698,

Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the

supplier of the CE approved gloves. This

recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with

the specific situation of anticipated use by our customers. It should not be construed as offering an

approval for any specific use scenario.

**Body Protection**Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of

protective equipment must be selected according to the concentration and amount of the dangerous substance

at the specific workplace.

**Respiratory protection** Where risk assessment shows air-purifying respirators

are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators

and components tested and approved under

appropriate government standards such as NIOSH (US)

or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do

not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Clear liquid
Color Brown
Odor Amine-like
Melting Point -30 °C

**Boiling Point** 170 - 173 °C @ 760 mmHg

**Decomposition Temperature** No data

Flash Point 55 °C (131 °F) – closed cup

Flammability Flammable
Explosive Properties Not available
Vapor Pressure Not available
Specific Gravity/Density 1.296 g/cm3

 pH (5% Solution)
 NA

 Vapor Density (Air = 1)
 > 1

 Solubility in water @ 20 °C
 4 g/L

# 10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions No data available

Conditions to avoid Heat, flames and sparks.

Incompatible materials Acids, oxidizing agents

Hazardous decomposition products Other decomposition products - no data available. In

the event of fire: see section 5.

# 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory or skin sensitization

no data available

no data available

no data available

no data available

Carcinogenicity

IARC: No component of this product present at levels greater

than or equal to 0.1% is identified asprobable, possible

or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater

than or equal to 0.1% is identified as a known or

anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.

Reproductive toxicity no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or

repeated exposure.

Aspiration hazard no data available

**Additional Information** 

RTECS: Not available

Cough, Shortness of breath, Headache, Nausea, Vomiting, May cause cyanosis. Prolonged or

repeated exposure can cause: Dizziness.

# 12.ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

Bioaccumulative potential no data available

Mobility in soil no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety

assessment not required/not conducted

Other adverse effects no data available

#### 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

**Product** Burn in a chemical incinerator equipped with an

afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service

to dispose of this material.

Contaminated packaging Dispose of as unused product.

## 14. TRANSPORT INFORMATION

Mode DOT/IMDG/IATA

UN Number 2942 Class (Subsidiary) 6.1

Proper Shipping Name 2- TRIFLUOROMETHYLANILINE

Hazard Label (Subsidiary) Flammable Liquid

Packing Group III
EMS-No F-A, S-A
Marine pollutant No

# 15. REGULATORY INFORMATION

TSCA CAS# 88-17-5 is listed on the TSCA inventory.

SARA 302 Components

No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

**SARA 313 Components** 

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components** 

No components are subject to the Massachusetts Right

to Know Act.

Pennsylvania Right To Know Components

α,α,α-Trifluoro-o-toluidine; CAS-No. 88-17-5; Revision

Date 2007-03-01

**New Jersey Right To Know Components** 

α,α,α-Trifluoro-o-toluidine; CAS-No. 88-17-5; Revision

Date 2007-03-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any

other reproductive harm..

#### **16. OTHER INFORMATION**

**HMIS Rating** Health hazard: 2

2 Flammability: 0 Physical hazard:

Health hazard: 2 **NFPA Rating** 

Fire hazard: 2 Reactivity hazard: 0

Legal Disclaimer:

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. Unless noted to the contrary, the technical information applies only to pure product. To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither Fluoryx Labs nor any of its affiliates makes any warranty, express or implied, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use, the manner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes.