

SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier:

2-AMINOENZOTRIFLUORIDE

IUPAC name: 2-aminobenzotrifluoride

CAS number: 88-17-5

EC number: 201-806-7

Registration number: 01-2119960627-28-0001

1.2. Relevant identified uses of the substance and uses advised against:

Raw material for industrial use.

Uses advised against: There are no uses advised against.

1.3. Details of the supplier of the safety data sheet:

Distributor:

Vinyl Kft

3524 Miskolc, Adler Károly u. 19.

Tel.: 003646432633

1.3.1. Responsible person: -

E-mail: ehsq@vinyl.hu

1.4. Emergency telephone number: **003646432633**

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance:

Classification according to Regulation 1272/2008/EC (CLP):

Acute toxicity 4 – H302

Skin irritation 2 – H315

Skin sensitisation 1 – H317

Eye irritation 2 – H319

Specific target organ toxicity (STOT) – repeated exposure 2 – H373

Hazardous to the aquatic environment, Chronic 2 – H411

Warning H statements:

H302 – Harmful if swallowed.

H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.

H319 – Causes serious eye irritation.

H373 – May cause damage to organs through prolonged or repeated exposure.

H411 – Toxic to aquatic life with long lasting effects.

2.2. Label elements:

IUPAC name: 2-aminobenzotrifluoride

CAS number: 88-17-5

EC number: 201-806-7

GHS07



GHS08



GHS09



WARNING

Warning H statements:**H302** – Harmful if swallowed.**H315** – Causes skin irritation.**H317** – May cause an allergic skin reaction.**H319** – Causes serious eye irritation.**H373** – May cause damage to organs through prolonged or repeated exposure.**H411** – Toxic to aquatic life with long lasting effects.**Precautionary P statements:****P264** – Wash hands thoroughly after handling.**P273** – Avoid release to the environment.**P280** – Wear protective gloves/protective clothing/eye protection/face protection.**P302 + P352** – IF ON SKIN: Wash with plenty of soap and water.**P305 + P351 + P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P337 + P313** – If eye irritation persists: Get medical advice/attention.**P332 + P313** – If skin irritation occurs: Get medical advice/attention.**P363** – Wash contaminated clothing before reuse.**P501** – Dispose of contents/container to a hazardous waste disposal landfill. Disposal must be provided.2.3. Other hazards:

No other known specific hazards for human or environment.

The substance does not meet the criteria for PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS3.1. Substance:

Description:

IUPAC name: 2-aminobenzotrifluoride

Synonym: α,α,α -Trifluoro-o-toluidine, 2-(Trifluoromethyl)aniline

CAS number: 88-17-5

EC number: 201-806-7

Formula: $C_7H_6F_3N$

Molar mass: 161,12 g/mol

Purity: > 99 %

Impurities: < 1 %

SECTION 4: FIRST AID MEASURES4.1. Description of first aid measures:

General: Immediately take victim out of danger zone. Immediately take off contaminated clothing. Wash affected skin with water. Keep patient warm. In case of respiratory arrest, administer artificial respiration. Call a physician. 48-hour medical observation is needed after the accident.

IN CASE OF INGESTION:

Measures:

- Call a physician immediately.
- If the victim is conscious, give a lot of milk or water to drink (wash mouth with water before).
- Do not induce vomiting.
- In case of vomiting turn the head down of the injured person.
- Get medical attention even if no symptoms or complaints occur.

IN CASE OF INHALATION:

Measures:

- Take the victim into fresh air, loosen his clothes and let him rest.
- If not breathing, give artificial respiration.
- In case of breathing difficulties, give oxygen.
- Get medical attention.

IN CASE OF SKIN CONTACT:

Measures:

- Remove the contaminated clothes and shoes.
- Wash the skin surface with plenty of water and soap (for 15 minutes).
- In case of complaints, obtain medical help.
- Wash clothing before reuse.

IN CASE OF EYE CONTACT:

Measures:

- In case of contact with eyes immediately flush with plenty of flowing water holding eyelids apart and moving the eyeballs (for at least 15 minutes).
- Get immediate medical attention.

4.2. **Most important symptoms and effects, both acute and delayed:**

The substance is dangerous due to cumulative effects. Highly irritating. Harmful if swallowed. May cause coughing, chest pain, respiratory failure, headache, vomiting, nausea, dizziness, cyanosis, narcotic effects. In contact with skin: irritation, allergic skin reactions may occur.

4.3. **Indication of any immediate medical attention and special treatment needed:**

No data available.

SECTION 5: FIRE-FIGHTING MEASURES5.1. **Extinguishing media:**

5.1.1. Suitable extinguishing media:

Choose extinguishing media depending on surrounding fire (water spray, carbon dioxide, dry extinguishing powder, polymer foam).

5.1.2. Unsuitable extinguishing media:

Do not use full water jet, because it can disperse and spread fire.

5.2. **Special hazards arising from the substance or mixture:**

In case of fire, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen fluoride may be formed, the inhalation of such combustion products can have serious adverse effects on health.

5.3. **Advise for fire fighters:**

Material is combustible.

Wear full protective clothing and self-contained breathing apparatus.

If during the fire yellow, white or brown fumes occur, use breathing apparatus in positive pressure mode and full protective clothing.

Cool the fire affected containers with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES6.1. **Personal precautions, protective equipment and emergency procedures:**

6.1.1. For non-emergency personnel:

Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Wear a respirator (self contained breathing apparatus), rubber boots, rubber gloves, chemical resistant clothing.

Do not touch spilled material.

6.2. **Environmental precautions:**

Dispose of spillage and waste (product/packaging) in accordance with all applicable environmental laws. Do not allow the substance and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. **Methods and material for containment and cleaning up:**

Evacuate affected area and must dam up the spill. Clean up spills immediately.

Collect the spilled material with absorbent (sawdust or sand), wait until it has solidified or been absorbed, then place into a suitable, closed, properly labelled chemical waste container for removal/disposal.

Ventilate area and wash spill site after material pickup is completed. Keep unauthorised persons away.

6.4. **Reference to other sections:**

For further and detailed information see section 8 and 13.

SECTION 7: HANDLING AND STORAGE7.1. **Precautions for safe handling:**

Observe conventional hygiene precautions.

This product should be handled only by, or under close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should consider the fire, health and chemical hazard data.

Care should be taken to prevent any chemical form coming in contact with the skin or eyes and from contaminating personal clothing.

Avoid long or repeated exposure.

Wear appropriate protective equipment (respirator, gloves, eye protection, face protection, protective clothing).

Wash body thoroughly after open handling of product.

Technical measures:

Ensure adequate ventilation.

Precautions against fire and explosion:

No special measures required.

7.2. Conditions for safe storage, including any incompatibilities:

Technical measures and storage condition:

Store in cool, dry, well-ventilated area away from sources of heat and incompatible substances.

Keep container tightly closed when not used.

Keep away from heat and ignition sources.

Avoid storing on wooden floors.

Keep away from flammable and incompatible materials (e.g. strong acids, oxidizing and reducing substances).

No open flames.

Ensure appropriate signs are in place.

Make sure extinguishing equipment is at hand.

Incompatible materials: see section 10.

Packaging material: no special prescriptions.

7.3. Specific end use(s):

No specific instructions available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION8.1. Control parameters:

Occupational exposure limit values:

The substance is not regulated with exposure limit value.

DNEL		Routes of exposure	Exposure frequency	Remarks:
Worker	Consumer			
no data available	no data available	Dermal	Short term (acute) Long term (repeated)	no data available
no data available	no data available	Inhalative	Short term (acute) Long term (repeated)	no data available
no data available	no data available	Oral	Short term (acute) Long term (repeated)	no data available

PNEC			Exposure frequency:	Remarks:
Water	Soil	Air		
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available

8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1 Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.

Do not eat or smoke at the workplace.

During breaks and at the end of work wash hands.

Immediately remove contaminated clothing.

Wash skin with plenty of water.

Ensure eyewash stations and emergency showers at the workplace.

8.2.2 Individual protection measures, such as personal protective equipment:

1. Eye/face protection: use appropriate closely fitting protective glasses (EN 166).

2. Skin protection:

a. Hand protection: use appropriate protective gloves (EN 374) (e.g. of rubber or PVC).

b. Other: use appropriate protective clothes, boots and apron.

3. Respiratory protection: use appropriate respirator with filter type A against organic vapours.

4. Thermal hazard: None known.

8.2.3. Environmental exposure controls:

No special measures required.

A risk assessment should be carried out at the workplace.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES9.1. Information on basic physical and chemical properties:

Parameter		Test method:	Remarks:
1. Appearance:	Colourless to light brown liquid		
2. Odour:	Foul-smelling		
3. Odour threshold:	no data available		
4. pH value:	no data available		
5. Melting point/ freezing point:	-33 °C	1013 hPa	
6. Initial boiling point/boiling range:	173 °C	1,0133 bar	
7. Flash point:	70 °C	Closed Cup	
8. Evaporation rate:	no data available		
9. Flammability (solid, gas):	no data available		
10. Upper/lower flammability or explosive limits:	no data available		
11. Vapour pressure:	2,1 mbar 12,1 mbar	20 °C 50 °C	
12 Vapour density:	no data available		
13. Relative density:	no data available		
14. Solubility(ies):	in water: 3,4 g/l (average), soluble in ethanol and diethyl-ether		
15. Partition coefficient: n-octanol/water:	2,32	OECD 107, Shake Flask Method	23 °C; pH ~7
16. Self-ignition temperature:	540 °C		
17. Degradation temperature:	no data available		
18. Viscosity:	no data available		
19. Explosive properties:	not explosive		
20. Oxidizing properties:	no data available		

9.2. Other information:

Density: 1,2965 g/cm³ DIN EN ISO 12185, 20 °C

SECTION 10: STABILITY AND REACTIVITY10.1. Reactivity:

None known.

10.2. Chemical stability:

At normal temperature and general conditions of work stable.

10.3. Possibility of hazardous reactions:

No hazardous reactions when used as directed.

10.4. Conditions to avoid:

None known.

10.5. Incompatible materials:

None known.

10.6. Hazardous decomposition products:

No thermal decomposition when stored and handled correctly.

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1. Information on toxicological effects:
Acute toxicity: harmful if swallowed.
Skin corrosion/irritation: causes skin irritation.
Serious eye damage/eye irritation: causes serious eye irritation.
Respiratory or skin sensitisation: may cause an allergic skin reaction.
Germ cell mutagenicity: none known.
Carcinogenicity: none known.
Reproductive toxicity: none known.
STOT-single exposure: none known.
STOT-repeated exposure: may cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: none known.
- 11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted:
No data available.
- 11.1.2. Relevant toxicological properties of the hazardous substances:
LD50 (oral, rat, male): 1890 mg/kg (values calculated)
LD50 (oral, rat, male/female): 1870 mg/kg (values calculated)
LD50 (dermal, combined): 4700 mg/kg (OECD 402)
- 11.1.3. Information on likely routes of exposure:
Ingestion, inhalation, skin contact, eye contact.
- 11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:
Absorption into the body leads to the formation of methemoglobin which is sufficient concentrations causes cyanosis (bluish discoloration of skin due to the deficient oxygenation of the blood).
Irritation / corrosion: Irritating to eyes, respiratory system and skin.
Repeated dose toxicity: Danger of cumulative effects.
- 11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:
Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.
- 11.1.6. Interactive effects:
No data available.
- 11.1.7. Absence of specific data:
No information.
- 11.1.8. Other information:
No data available.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity:
Toxic to aquatic life with long lasting effects.
- 12.2. Persistence and degradability:
No data available.
- 12.3. Bioaccumulation potential:
No data available.
- 12.4. Mobility in soil:
No data available.
- 12.5. Results of PBT and vPvB assessment:
No data available.
- 12.6. Other adverse effects:
May damage water supply even if small quantities enter groundwater. Do not empty into drains, groundwater or surface waters.

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. Waste treatment methods:
Disposal according to the local regulations.
- 13.1.1. Information regarding the disposal of the product:
Dispose according to the relevant regulations.
Do not empty into drains.
Do not dispose together with household waste.
European Waste Code:
No appropriate EWC code can be given for the substance, since the identification of the proper code can be done with the method of use defined by the user of the substance. The European waste code number has to be determined after a discussion with a specialist dealing with waste disposal.

- 13.1.2. Information regarding the disposal of the packaging:
Collect separately. Dispose according to the relevant regulations, as hazardous waste.
- 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:
None known.
- 13.1.4. Sewage disposal:
None known.
- 13.1.5. Special precautions for any recommended waste treatment:
No data available.

SECTION 14: TRANSPORT INFORMATION

- 14.1. UN Number:
2942
- 14.2. UN proper shipping name:
2-TRIFLUOROMETHYLANILINE
- 14.3. Transport hazard class(es):
6.1
Kemler Number: 60
Label: 6.1
Classification code: T1
- 14.4. Packaging group:
III
- 14.5. Environmental hazard:
Do not allow material to enter drains or streams, waters, waste-water or soil. Correct handling will produce no environmental problems.
- 14.6. Special precautions for user:
Avoid contact with material. Toxic by inhalation, in contact with skin and if swallows. Irritating to eyes, respiratory system and skin.
Danger of cumulative effects.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:
Not applicable.

SECTION 15: REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 15.2. Chemical safety assessment: no information available.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet:
The safety data sheet has been revised according to Regulation 2015/830 /EU (Section 1-16).
The classification of the substance have been amended according to Regulation 1272/2008/EC (CLP) and its amendments.

Full text of the abbreviations in the safety data sheet:
DNEL: Derived no effect level. PNEC: Predicted no effect concentration. CMR effects: carcinogenicity, mutagenicity and toxicity for reproduction. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent, Very Bioaccumulative. n.d.: not defined. n.a.: not applicable.

Key literature references and sources for data: previous version of safety data sheet (November 2010., version 2.).

Relevant H-Phrases (number and full text) of Section 2 and 3:

H302 – Harmful if swallowed.

H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.

H319 – Causes serious eye irritation.

H373 – May cause damage to organs through prolonged or repeated exposure.

H411 – Toxic to aquatic life with long lasting effects.

Training advice: no data available.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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