


[Boron Trifluoride Ethylamine Complex](#) [Pricing >](#)

Linear Formula	BF ₃ •C ₂ H ₅ NH ₂
Pubchem CID	6355
MDL Number	MFCD00144277
EC No.	200-852-5
IUPAC Name	ethanamine; trifluoroborane
SMILES	FB(F)F.NCC
Inchl Identifier	InChI=1S/C2H7N.BF3/c1-2-3;2-1(3)4/h2-3H2,1H3;
Inchl Key	JDVIRCVIXCMTPU-UHFFFAOYSA-N
Signal Word	Danger
Hazard Statements	H314
Hazard Codes	C
Precautionary Statements	P280-P305 + P351 + P338-P310
Flash Point	Not applicable
Risk Codes	34
Safety Statements	26-27-36/37/39-45
RTECS Number	KQ8060000
Transport Information	UN 3261 8 / PGII
WGK Germany	3
GHS Pictograms	<u>GHS05</u> <u>Corrosive</u> 

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SAFETY DATA SHEET

Date Accessed: 04/23/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #75-23-0

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin corrosion(Category 1B), H314
Serious eye damage(Category 1), H318
GHS Label elements, including precautionary statements
Pictogram



Signal word
Danger
Hazard statement(s)
H314
Causes severe skin burns and eye damage.
H318
Causes serious eye damage.
Precautionary statement(s)
P260
Do not breathe dust or mist.
P264
Wash skin thoroughly after handling.
P280
Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353
IF ON SKIN (or hair): Remove/ Take off immediately

all contaminated clothing. Rinse skin with water/
shower.

P304 + P340 + P310

IF INHALED: Remove victim to fresh air and keep at
rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/
physician.

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several
minutes. Remove contact lenses, if present and easy
to do. Continue rinsing. Immediately call a POISON
CENTER or doctor/ physician.

P363

Wash contaminated clothing before reuse.

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

Lachrymator.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C₂H₇BF₃N

Molecular weight: 112.89 g/mol

CAS-No.: 75-23-0

EC-No.: 200-852-5

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to
the doctor in attendance.

Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not
breathing, give artificial respiration. Consult a
physician.

In case of skin contact

Take off contaminated clothing and shoes
immediately. Wash off with soap and plenty of water.
Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15
minutes and consult a physician.

Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11
Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture
Carbon oxides, Nitrogen oxides (NO_x), Hydrogen fluoride, Borane/boron oxides
Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Further information
No data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing Vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
Reference to other sections
For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of dust and aerosols.
Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.
Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature 2 -8 °C
Storage class (TRGS 510): Non-combustible, corrosive hazardous materials
Specific end use(s)
Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values.
Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
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.
Body Protection
Complete suit protecting against chemicals, 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 particle respirator type N100 (US) or type P3 (EN 143) 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

Do not let product enter drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Form: Crystalline

Color: White to off-white

Odor

No data available

Odor Threshold

No data available

pH

No data available

Melting point/freezing point

Melting point/range: 85 -89 °C (185 -192 °F)-lit.

Initial boiling point and boiling range

No data available

Flash point

157 °C (315 °F)-closed cup

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper/lower flammability or explosive limits

No data available

Vapor pressure

No data available

Vapor density

No data available

Relative density

No data available

Water solubility

No data available

Partition coefficient: n-octanol/water

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Viscosity

No data available

Explosive properties

No data available

Oxidizing properties

No data available
Other safety information
No data available

SECTION 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
No data available
Incompatible materials
Strong bases, Strong oxidizing agents
Hazardous decomposition products
Other decomposition products-No data available
In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity
No data available
Inhalation: No data available
Dermal: No data available
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC:
No component of this product present at levels greater than or equal to 0.1% is identified as probable, 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

No data available

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity -repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: KQ8060000

Cough, Shortness of breath, Headache, Nausea, Vomiting

SECTION 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

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

UN number: 3261

Class: 8

Packing group: II

Proper shipping name: Corrosive solid, acidic,
organic, n.o.s.(Ethylamine--Boron trifluoride)

Reportable Quantity(RQ):

Poison Inhalation Hazard: No

IMDG

UN number: 3261

Class: 8

Packing group: II

EMS-No: F-A, S-B

Proper shipping name: CORROSIVE SOLID, ACIDIC,
ORGANIC, N.O.S.(Ethylamine--Boron trifluoride)

IATA

UN number: 3261

Class: 8

Packing group: II

Proper shipping name: Corrosive solid, acidic,
organic, n.o.s.(Ethylamine--Boron trifluoride)

SECTION 15. REGULATORY INFORMATION

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

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts
Right to Know Act.

Pennsylvania Right To Know Components

Ethylamine--Boron trifluoride

CAS-No.

75-23-0

New Jersey Right To Know Components

Ethylamine--Boron trifluoride

CAS-No.

75-23-0

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

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.
