

# SAFETY DATA SHEET

Date Printed: 05/27/2024 Date Revised: 01/15/2022

## **SECTION 1. IDENTIFICATION**

Product Identifier: (2N) 99% Barium bis(trifluoromethylsulfonyl)imide

Product Code: BA-FMSI-02

CAS Number: 168106-22-7

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:

+1 800-424-9300

#### **SECTION 2. HAZARDS IDENTIFICATION**

2.1 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

2.2 GHS Label elements, including precautionary statements



**Pictogram** 

Signal word Danger

Hazard statement(s)

H314 Causes severe skin burns and 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 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

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

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

3.1 Substances

Formula: C4BaF12N2O8S4 Molecular Weight: 697.62 g/mol

CAS-No.: 168106-22-7 Hazardous components

Component Classification Concentration Barium bis(trifluoromethanesulfonimide)

Skin Corr. 1B; Eye Dam. 1;

H314

**SECTION 4. FIRST AID MEASURES** 

#### 4.1 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.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed no data available

## **SECTION 5. FIREFIGHTING MEASURES**

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

6.1 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.

6.2 Environmental precautions

Do not let product enter drains.

6.3 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.

6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7. HANDLING AND STORAGE**

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic Store under nitrogen.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 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**

- 9.1 Information on basic physical and chemical properties
- a) Appearance Form: solid
- b) Odor no data available
- c) Odor Threshold no data available
- d) pH no data available
- e) Melting point/freezing

point

Melting point/range: > 300 °C (> 572 °F)

f) Initial boiling point and

boiling range

no data available

- g) Flash point not applicable
- h) EVaporation rate no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower

flammability or

explosive limits

no data available

- k) Vapor pressure no data available
- I) Vapor density no data available
- m) Relative density no data available
- n) Water solubility no data available
- o) Partition coefficient: noctanol/

water

no data available

p) Auto-ignition

temperature

no data available

q) Decomposition

temperature

no data available

- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available
- 9.2 Other safety information

no data available

#### **SECTION 10. STABILITY AND REACTIVITY**

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Sulphur

oxides, Hydrogen fluoride, Barium oxide

Other decomposition products - no data available

In the event of fire: see section 5

# **SECTION 11. TOXICOLOGICAL INFORMATION**

11.1 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: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12. ECOLOGICAL INFORMATION**

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### 13.1 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: 1759 Class: 8 Packing group: II

Proper shipping name: Corrosive solids, n.o.s. (Barium bis(trifluoromethanesulfonimide))

Reportable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN number: 1759 Class: 8 Packing group: II EMS-No: F-A, S-B

Proper shipping name: CORROSIVE SOLID, N.O.S. (Barium bis(trifluoromethanesulfonimide))

Marine pollutant: No

IATA

UN number: 1759 Class: 8 Packing group: II

Proper shipping name: Corrosive solid, n.o.s. (Barium bis(trifluoromethanesulfonimide))

## **SECTION 15. REGULATORY INFORMATION**

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: 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

Barium bis(trifluoromethanesulfonimide)

CAS-No.

168106-22-7

**Revision Date** 

New Jersey Right To Know Components

Barium bis(trifluoromethanesulfonimide)

CAS-No.

168106-22-7

**Revision Date** 

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

dditional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS RANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.	. LICENSED