

Safety Data Sheet



1: Identification

1.1: Product Identifier

Product Name: BaBr₂
Product Number(s): 1BABR2-0005F
CAS Number: 10553-31-8
SDS Document Number: 000015

1.2: Recommended Uses and Restrictions

Recommended Uses

Manufacture of substances

Restrictions

Not for food or drug use.

1.3: Supplier Contact Information

APL Engineered Materials, Inc.
2401 N. Willow Rd.
Urbana, IL 61802
Phone: 217-367-1340
Fax: 217-367-9084

1.4: Emergency Phone Number

International: +01-813-248-0585
United States: 800-255-3924

2: Hazards Identification

2.1: Classifications

Acute Toxicity, Inhalation - Category 4
Acute Toxicity, Oral - Category 4

2.2: GHS Label Elements

Pictograms



Signal Word: Warning

Hazard Statements

H302: Harmful if swallowed.
H332: Harmful if inhaled.

Precautionary Statements

P261: Avoid breathing dust.

P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.
P501: Dispose of contents/container to licensed disposal facility.

2.3: Hazards Not Otherwise Classified or Not Covered by GHS

None.

2.4: Amount(s) of substances with unknown toxicity

None

3: Composition/Information on Ingredients

3.1: .Ingredient	.Weight%	.Formula	.CAS Number	.Mol Wt	.EC Number
BaBr2	100	BaBr2	10553-31-8	297.14	234-140-0

3.2: Other Hazardous components

none

3.3: Trade Secret Disclaimer

none

3.4: Synonyms

Barium Bromide
Barium (II) bromide

4: First Aid Measures

4.1: First Aid

General

Consult with physician and provide this Safety Data Sheet

Remove person from area of exposure and remove any contaminated clothing

In contact with eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Seek medical attention if irritation develops or persists

In contact with skin

Wash thoroughly with soap and plenty of water. Remove all contaminated clothing for proper laundering. Seek medical attention if irritation develops or persists.

If swallowed

If conscious and alert, rinse mouth and drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical aid.

If inhaled

Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

4.2: Most important symptoms and effects; acute and delayed

Stomach irregularities based on human evidence.

Harmful if swallowed.

Harmful if inhaled

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

no data available

5: Fire Fighting Measures

5.1: Fire extinguishing media

dry chemical

carbon dioxide

water or alcohol-resistant foam

5.2: Specific hazards arising from the substance or mixture

hydrobromic acid and hydrobromic acid fumes

barium oxide

5.3: Special protective equipment and precautions for firefighters.

Wear self contained breathing apparatus for fire fighting if necessary

6: Accidental Release Measures

6.1: Personal precautions, protective equipment, and emergency procedures.

Avoid dust formation.

Avoid breathing dust.

For personal protection see section 8.

Evacuate personnel to safe areas.

Use personal protective equipment.

Ensure adequate ventilation.

6.2: Methods and materials for containment and cleaning up.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

6.3: Environmental precautions

Do not let product enter drains.

6.4: Disposal

Dispose of in accordance with local regulations.

See section 13.

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.

Avoid contact with skin and eyes.

See precautionary statements in section 2.2.

7.2: Conditions for safe storage

Store in a dry and well-ventilated place.

Store away from moisture.

Store under inert gas.

Keep container tightly closed.

7.3: Incompatibilities

oxidizing agents

acids

8: Exposure Controls/Personal Protection

8.1: Control parameters

OSHA permissible exposure limit (PEL)

0.5 mg/m³ (TWA) (as Ba)

ACGIH threshold limit value (TLV)

0.5 mg/m³ (as Ba)

NIOSH recommended exposure limit (REL)

0.5 mg/m³ (as Ba)

8.2: Engineering controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower

Use adequate ventilation to keep airborne concentrations low

8.3: Personal protective equipment

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, chemical-resistant protective gloves to prevent skin exposure.

Clothing

Wear appropriate protective clothing to prevent skin exposure

Respirator

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary

9: Physical and Chemical Properties

9.a: Appearance

State: solid

Form: powder or spheres

Color: white

9.b: Odor: no data available

9.c: Odor threshold: no data available

9.d: pH: no data available

9.e: Melting point / freezing point: 857 °C (1,575 °F)

- 9.f: Initial boiling point and range: 1,835 °C (3,335 °F)
9.g: Flashpoint: no data available
9.h: Evaporation rate: no data available
9.i: Flammability (solid, gas): no data available
9.j: Upper/lower flammability or explosive limits: no data available
9.k: Vapor pressure: no data available
9.l: Vapor density: no data available
9.m: Relative density: 4.78 g/cm³
9.n: Water Solubility: 92.2 g/100 mL (0°C)
9.o: Partition coefficient: n-octanol/water: no data available
9.p: Auto-ignition temperature: no data available
9.q: Decomposition temperature: no data available
9.r: Viscosity: no data available

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
exposure to water
In the event of fire: see section 5
- 10.5: Incompatible materials
See section 7.3.
- 10.6: Hazardous decomposition products
In the event of fire: see section 5.2
Other decomposition products - no data available

11: Toxicological Information

- 11.1: Toxicity data
- Acute toxicity - Oral
Harmful if swallowed.
 - Acute toxicity - Dermal
no data available
 - Acute toxicity - Inhalation
Harmful if inhaled.
 - Skin corrosion/irritation

no data available

Eye damage/irritation
No data available.

Respiratory irritation
No data available.

Germ cell mutagenicity
no data available

Reproductive toxicity
no data available

Specific organ toxicity - single exposure
No data available.

Specific organ toxicity - repeated exposure
No data available.

Aspiration hazard
No data available.

Additional information
No data available.

ACGIH carcinogenicity
The ACGIH has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

IARC carcinogenicity
The IARC has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

NTP carcinogenicity
The NTP has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

OSHA carcinogenicity
OSHA has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

11.2: Routes of exposure

See section 2.2

skin
oral
eyes

11.3: Symptoms of exposure

See section 4.2

11.4: Delayed and immediate effects of exposure

Inorganic bromides may lead to depression, emaciation and in severe cases psychosis and severe mental deterioration. Bromoderma, a bromine rash, often occurs from prolonged exposure and usually occurs on the face resembling acne or furunculosis.

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

12: Ecological Information

12.1: Ecotoxicity

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available

Toxicity to algae/bacteria

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: Other effects

no data available

13: Disposal Considerations

13.1: Waste treatment methods

No data available

13.2: Safe handling

See section 7.1 .

13.3: Product disposal

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

13.4: Packaging disposal

Dispose of as unused product.

14: Transport Information

14.1: DOT(US)

UN Number: 1564

Proper Shipping Name: Barium compounds, n.o.s. (Barium bromide)

Packing Group: II

Shipping Class(es): 6.1

Marine Pollutant: No

14.2: IMDG

UN Number: 1564

Proper Shipping Name: Barium compounds, n.o.s. (Barium bromide)

Packing Group: II

Shipping Class(es): 6.1

Marine Pollutant: No

14.3: IATA

UN Number: 1564

Proper Shipping Name: Barium compounds, n.o.s. (Barium bromide)

Packing Group: II

Shipping Class(es): 6.1

14.4: Special Shipping Precautions

None

15: Regulatory Information

15.1: TSCA inventory

This material is listed on the TSCA inventory.

15.2: SARA 302 components

This material is not subject to the reporting requirements of SARA Title III, Section 302.

15.3: SARA 313 components

This material is subject to the reporting requirements of SARA Title III, Section 313.

15.4: SARA 313/312 hazards

Acute health hazard.

Chronic health hazard.

15.5: Other information

Pennsylvania Right To Know Components - This product contains materials listed on the Pennsylvania Right to Know list

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.

Massachusetts Right To Know Components - This product contains materials listed on the Massachusetts Right to Know list

New Jersey Right To Know Components - This product contains materials listed on the New Jersey Right to Know list

16: Additional Information

16.1: NFPA

Health: 2

Fire: 0

Reactivity: 0

Special:

16.2: HMIS

Health: 2

Chronic: *

Flammability: 0

Physical Hazard: 0

16.3: Disclaimers

The information herein is believed to be accurate and reliable as of the date compiled. However, APL Engineered Materials, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.

For industrial use only. Not for drug, household or other uses

16.4: References

Information contained on this SDS sheet was obtained from some or all of the following sources: American Conference of Governmental Industrial Hygienists (ACGIH), TLVs and BEIs; National Institute for Occupational Safety and Health (NIOSH), Pocket Guide to Chemical Hazards; European Chemicals Agency, <http://echa.europa.eu/>; The National Institute of Health, U.S National Library of Medicine, TOXNET, Toxicology Data Network; and the Registry of Toxic Effects of Chemical Substances (RTECS) database.

16.5: Version

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