

# SAFETY DATA SHEET

Date Printed: 09/21/2024 Date Revised: 01/15/2022

#### **SECTION 1. IDENTIFICATION**

Product Identifier: (2N) 99% Lutetium Bromide Hydrate

Product Code: LU-BR-02-C.XHYD

CAS Number: 29843-94-5

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
Not a hazardous substance or mixture.
2.2 GHS Label elements, including precautionary statements
Not a hazardous substance or mixture.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : Br3Lu xH2O
Molecular Weight : 414.68 g/mol
CAS-No. : 29843-94-5
EC-No. : 238-446-5
No ingredients are hazardous according to OSHA criteria.
No components need to be disclosed according to the applicable regulations.

# **SECTION 4. FIRST AID MEASURES**

4.1 Description of first aid measures
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact
Wash off with soap and plenty of water.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.
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
Hydrogen bromide gas, lutetium oxides
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 Avoid dust formation. Avoid breathing Vapors, mist or gas.
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 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

Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.

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.

Keep in a dry place.

# **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

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

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

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and

to the specific work-place., The type of protective equipment must be selected according to the concentration

and amount of the dangerous substance at the specific workplace.

**Respiratory protection** 

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type

N95 (US) or type P1 (EN 143) dust masks. 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: powder
Colour: white
b) Odor no data available
c) Odor Threshold no data available
d) pH no data available
e) Melting point/freezing
point
no data available
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
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**

12.1 Toxicityno data available12.2 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 14. TRANSPORT INFORMATION**

DOT (US) Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods

# **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 No SARA Hazards Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act. Pennsylvania Right To Know Components Lutetium(III) bromide hydrate CAS-No. 29843-94-5 **Revision Date** New Jersey Right To Know Components Lutetium(III) bromide hydrate CAS-No. 29843-94-5 **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 additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.