Heegermaterials

SAFETY DATA SHEET

Version 6.3 Revision Date 09/13/2023 Print Date 01/27/2024

| SECT | SECTION 1: Identification of the substance/mixture and of the company/undertaking | | | | | | |
|--|---|---|--|--|--|--|--|
| 1.1 | Product identifiers | | | | | | |
| | Product name | [:] Gadolinium(III) acetate hydrate | | | | | |
| | CAS-No. | : 100587-93-7 | | | | | |
| 1.2 Relevant identified uses of the substance or mixture and uses advised | | | | | | | |
| | Identified uses | : Laboratory chemicals, Synthesis of substances | | | | | |
| 1.3 Details of the supplier of the safety data sheet | | | | | | | |
| | Company | : Heeger Materials Inc. | | | | | |
| | Heen | 230 Steele St Denver CO 80206 United States | | | | | |
| | Telephone | : +925-385-8104 | | | | | |
| 1.4 | Emergency telephone | · lat | | | | | |
| | Emergency Phone # | : 800-424-9300 CHEMTREC (USA) +1-703- 527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week | | | | | |
| | | S I | | | | | |
| SECT | ION 2: Hazards identific | cation | | | | | |
| 2.1 | Classification of the sub | ostance or mixture | | | | | |
| | GHS Classification in ac | cordance with 29 CFR 1910 (OSHA HCS) | | | | | |
| | Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 | | | | | | |
| | For the full text of the H-Statements mentioned in this Section, see Section 16. | | | | | | |

2.2 GHS Label elements, including precautionary statements

Pictogram



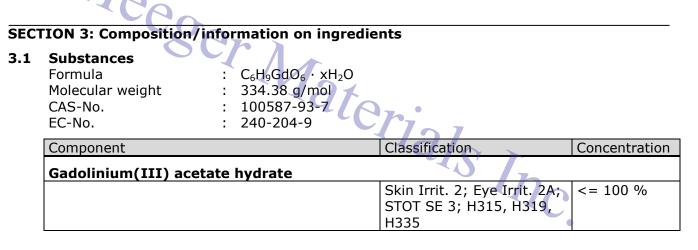
Signal Word

Warning

Page 1 of 9

| Hazard statement(s) H315 H319 H335 | Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. |
|--|---|
| Precautionary statement(s) P261 P264 P271 | Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. |
| P280 P302 + P352 P304 + P340 + P312 | Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332 + P313 P337 + P313 P362 | If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. |
| P403 + P233 P405 P501 | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/ container to an approved waste disposal plant. |

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



For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture Carbon oxides

gadolinium oxides

5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Page 3 of 9

SECTION 7: Handling and storage

7.1 Precautions for safe handling For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Hygroscopic.

Storage class Storage class (TRGS 510): 11: Combustible Solids

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

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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). Safety glasses

Skin protection

Handle with impervious gloves.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

Recommended Filter type: Filter type P2

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

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) | рН | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available ()No data available No data available No data available |
| g) | Flash point | ()No data available |
| 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) | Density | No data available |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| | | |

- p) Autoignition No data available temperature
- q) Decomposition No data available temperature
- No data available Viscosity r)
- s) Explosive properties No data available
- Oxidizing properties No data available t)
- 9.2 **Other safety information** No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

- **10.2 Chemical stability** The product is chemically stable under standard ambient conditions (room temperature).
- 10.3 Possibility of hazardous reactions No data available
- 10.4 Conditions to avoid Avoid moisture.

Oral: No data available Inhalation: No data available Dermal: No data available No data available

Skin corrosion/irritation Remarks: No data available

Serious eye damage/eye irritation Remarks: No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity

No data available

Carcinogenicity

- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- No component of this product present at levels greater than or equal to 0.1% is OSHA: on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

11.2 Additional Information

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

SECTION 12: Ecological information

9

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

Materials Inc. 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

- 12.6 Endocrine disrupting properties No data available
- 12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

ΙΑΤΑ

Not dangerous goods

Further information

Not classified as dangerous in the meaning of transport regulations.

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.

Massachusetts Right To Know Components

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

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

Pennsylvania Right To Know Components

| Gadolinium(III) acetate hydrate | CAS-No. 100587-93-7 | Revision Date |
|--|------------------------|---------------|
| New Jersey Right To Know Components Gadolinium(III) acetate hydrate | CAS-No. 100587-93-7 | Revision Date |

Page 8 of 9

SECTION 16: Other information

Further information

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. Heeger Materials Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See www.heegermaterials.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2020 Heeger Materials Inc. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact sales@heegermaterials.com.

Version: 6.3 Revision Date: 09/13/2023 Print Date: 01/27/2024 it. Heeser Materials Inc.