

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 14/07/2011 Revision date: 19/07/2021 Supersedes: 14/07/2011 Version: 2.0

GALM-3697

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. **Product identifier**

Product form : Substance

GALLIUM-69 SESQUIOXIDE (69Ga2) Substance name

EC-No. 234-691-7 (Unlabeled)

CAS-No. : 14391-02-7 Product code : GALM-3697 Formula Ga2O3

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use

: For professional use only Industrial/Professional use spec

Uses advised against

No additional information available

Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

GHS-US classification

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

No labeling applicable

GHS-US labeling

No labeling applicable

Other hazards

No additional information available

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
GALLIUM-69 SESQUIOXIDE (69Ga2)	(CAS-No.) 14391-02-7 (EC-No.) 234-691-7 (Unlabeled) (EC Index-No.)	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
GALLIUM-69 SESQUIOXIDE (69Ga2)	(CAS-No.) 14391-02-7 (EC-No.) 234-691-7 (Unlabeled) (EC Index-No.)	100	Notclassified

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
GALLIUM-69 SESQUIOXIDE (69Ga2) (Main constituent)	(CAS-No.) 14391-02-7	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.

First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area. If not breathing give

artificial respiration. Get medical advice/attention.

First-aid measures after skin contact : Wash with plenty of soap and water. and soap. Get immediate medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get

medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May be harmful if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact : May be harmful in contact with skin. May cause moderate irritation.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Suitable extinguishing agents: Carbon dioxide, extinguishing powder or water spray. Fight

larger fires with water spray or alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing

apparatus. Do not enter fire area without proper protective equipment, including respiratory

protection.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid breathing vapors, mist, gas. Avoid dust formation.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

 $refer\ to\ section\ 8:\ "Exposure\ controls/personal\ protection".$

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6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Provide adequate ventilation to minimize dust and/or vapor concentrations.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Handle in accordance with good industrial hygiene and safety

practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed. Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.









Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.

Molecular mass : 187.44 g/mol (Labeled)

Color : White.

No data available Odor Odor threshold No data available рΗ No data available No data available Relative evaporation rate (butyl acetate=1) Melting point No data available : No data available Freezing point **Boiling** point No data available No data available Flash point No data available Auto-ignition temperature Decomposition temperature No data available Flammability (solid, gas) No data available Vapor pressure No data available

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: No data available Relative vapor density at 20 °C No data available Relative density

Specific gravity / density : 5.88 g/ml at 25 °C (77 °F)

: No data available Solubility Log Pow : No data available Log Kow No data available : No data available Viscosity, kinematic No data available Viscosity, dynamic No data available Explosive properties No data available Oxidizing properties : No data available **Explosion limits**

Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

No additional information available

Chemical stability

Stable if stored under recommended conditions.

Possibility of hazardous reactions

No additional information available

Conditions to avoid

No additional information available

Incompatible materials 10.5.

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity	: Not classified	
GALLIUM-69 SESQUIOXIDE (69Ga2) (14391-02-7)		
LD50 oral	Mouse - 10,000 mg/kg Flaccid paralysis without anesthesia, Somnolence, Food intake	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity – single exposure	: Not classified	
Specific target organ toxicity – repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.	
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.	
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.	
Symptoms/effects after eye contact	: May cause eye irritation.	
Symptoms/effects after ingestion	: May be harmful if swallowed.	

SECTION 12: Ecological information

12.1	 To	xic	itv

: The product is not considered harmful to aquatic organisms or to cause long-term adverse Ecology - general effects in the environment.

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12.2. Persistence and degradability

No additional information available

Bioaccumulative potential 12.3

No additional information available

12.4. Mobility in soil

No additional information available

Results of PBT and vPvB assessment 12.5.

No additional information available

Other adverse effects

Other adverse effects : Avoid release to the environment. Disposal must be done according to official regulations.

SECTION 13: Disposal considerations

Waste treatment methods

Waste materials should be disposed of under conditions which meet Federal, State, and local Regional legislation (waste)

environmental control regulations

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed Product/Packaging disposal recommendations

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

UN number 14.1.

Not applicable

UN proper shipping name 14.2.

Not applicable

14.3. **Additional information**

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

Environmental hazards

Other information : No supplementary information available.

Special precautions for user 14.5.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code 14.6.

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

GALLIUM-69 SESQUIOXIDE (69Ga2) (14391-02-7)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	

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15.2. International regulations

CANADA

GALLIUM-69 SESQUIOXIDE (69Ga2) (14391-02-7)

Listed on the Canadian DSL (Domestic Substances List)

15 2 1 National regulations

No additional information available

15.3. US State regulations

GALLIUM-69 SESQUIOXIDE (69Ga2)(14391-02-7)	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

NFPA health hazard

: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

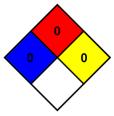
NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even

under fire conditions.



Hazard Rating

: 0 Minimal Hazard - No significant risk to health

Flammability : 0 Minimal Hazard Physical : 0 Minimal Hazard

CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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