

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: SAMARIUM OXIDE 99.9% AR

CAS#: - 12060-58-1

C.I. No.: Not available.

Synonym: Not available.

Chemical Name: Not available.

Chemical Formula: Sm2O3

Composition and Information on Ingredients

| Name | S.K.U | % by Weight |
|----------------------------|----------|-------------|
| SAMARIUM OXIDE 99.9% AR | GCS-4630 | 100 |

Hazards Identification

3.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Not classified.

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Not classified.

3.2. Label elements

Labelling EC 67/548 or EC 1999/45

Not classified.

S Phrase(s) : S22 : Do not breathe dust. S24/25 : Avoid contact with skin and eyes.

Labelling Regulation EC 1272/2008 (CLP)

Not classified.

3.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT



substance or vPvB substance according to Annex XIII of Regulation REACH.

First Aid Measures

4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest. Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Ingestion : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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

Symptoms relating to use : Not expected to present a significant hazard under anticipated conditions of normal Use

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Fire and Explosion Data

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Unsuitable extinguishing media : Do not use a heavy water stream. Surrounding fires : Use water spray or fog for cooling exposed containers.

<u>5.2.</u> Special hazards arising from the substance or mixture Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

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

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) firefighting water to enter environment.

Accidental Release Measures

<u>6.1.</u> Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection. Ventilate area.



6.2. For non-emergency personnel : Evacuate unnecessary personnel. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

Handling and Storage

7.1. Precautions for safe handling

Handling :Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

Exposure Controls/Personal Protection

<u>8.1.</u> Exposure controls

Personal protection : Avoid all unnecessary exposure.

- Respiratory protection : Wear approved mask.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Others : When using, do not eat, drink or smoke.



8.2. Control parameters

Occupational Exposure Limits : No data available.

Physical and Chemical Properties

Information on basic physical and chemical properties

| Physical state at 20 °C | : Solid. |
|------------------------------------|-------------------------|
| Colour | : Cream coloured powder |
| Odour | : Odorless |
| Odour threshold | : No data available. |
| pH value | : Not applicable. |
| Melting point [°C] | : 2300°C |
| Decomposition point [°C] | : N/A |
| Critical temperature [°C] | : N/A |
| Auto-ignition temperature [°C] | : N/A |
| Flammability (solid, gas) | : N/A |
| Flash point [°C] | : N/A |
| Boiling point [°C] | : N/A |
| Initial boiling point [°C] | : N/A |
| Final boiling point [°C] | : N/A |
| Evaporation rate | : N/A |
| Vapour pressure [20°C] | : N/A |
| Vapour pressure mm/Hg | : N/A |
| Vapour density | : N/A |
| Density [g/cm3] | : 8,347 |
| Relative density, gas (air=1) | : N/A |
| Relative density, liquid (water=1) | : N/A |
| Solubility in water [% weight] | : Insoluble in water |
| Solubility in water | : N/A |
| Log Pow octanol / water at 20°C | : No data available. |
| Solubility | : N/A |
| Viscosity at 40°C [mm2/s] | : N/A |
| | |

Stability and Reactivity Data

10.1. Reactivity

Reactivity : Not established.

10.2. Chemical stability



Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

<u>10.6.</u> Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

Toxicological Information

Information on toxicological effects:

Acute toxicity

- Inhalation : Based on available data, the classification criteria are not met.
- Dermal : Based on available data, the classification criteria are not met.

• Ingestion : Based on available data, the classification criteria are not met. Corrosion : Based on available data, the classification criteria are not met. Irritation : Based on available data, the classification criteria are not met. Sensitization : Based on available data, the classification criteria are not met. Mutagenicity : Based on available data, the classification criteria are not met.

• Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

Ecological Information



<u>12.1.</u> Toxicity

Toxicity information : Not established.

12.2. Persistence – degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

<u>12.6.</u> Other adverse effects

Environmental precautions : Avoid release to the environment.

Disposal Considerations

. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Transformation Information

Land transport (ADR-RID)

General information

Sea transport (IMDG) [English only]

General information

Air transport (ICAO-IATA) [English

only]

General information

: Not regulated.

: Not regulated.

: Not regulated.



Other Regulatory Information

<u>15.1.</u> Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental : Ensure all national/local regulations are observed. regulations/legislati on specific for the substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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