



LTS Research Laboratories, Inc.
Safety Data Sheet

Samarium (III) Nitrate Hexahydrate

1. Product and Company Identification

Trade Name: Samarium (III) Nitrate Hexahydrate
Chemical Formula: $\text{Sm}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 2001 Oaks Pkwy
City: Belmont
State: North Carolina
Zip Code: 28012
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word:

Danger



Hazard Statements:

H272: May intensify fire; oxidizer
H315: Causes skin irritation
H272: May intensify fire; oxidizer
H319: Causes serious eye irritation
H335: May cause respiratory irritation

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
P220: Keep away from clothing and other combustible materials
P221: Take any precaution to avoid mixing with combustibles
P261: Avoid breathing dust/fume/vapor/gas/mist/spray
P264: Wash skin thoroughly after handling
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312: 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: If skin irritation occurs: Get medical advice/ attention
P337 + P313: If eye irritation persists: Get medical advice/ attention
P362: Take off contaminated clothing and wash before reuse

P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
P403 + P233: Store in a well-ventilated place. Keep container tightly closed
P405: Store locked up
P501: Dispose of contents/ container to an approved waste disposal plant.

HMIS Health Ratings (0-4):	Powder
Health:	1
Flammability:	0
Physical:	2

3. Composition

Chemical Family:	Inorganic Compound
Additional Names:	N/A

Samarium(III) nitrate hexahydrate ($\text{Sm}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$):	
Percentage:	0-100 wt%
CAS #:	13759-83-6
EC #:	233-798-6

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.
Ingestion:	Rinse mouth with water. Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

5. Firefighting Measures

Flammability:	Non-flammable, except as powder
Extinguishing Media:	Water spray. Carbon dioxide (CO_2). Dry chemical. Chemical foam
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Nitrile rubber gloves, NBR 0.11mm thick
Penetration time of glove material:	480 minutes
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Yellow
Form:	Powder
Odor:	Odorless
Water Solubility:	Soluble
Boiling Point:	N/A
Melting Point:	78°C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	444.5 g/mol.
Stability:	Hygroscopic. Stable under recommended storage settings.
Reacts With:	Combustible/organic materials
Incompatible Conditions:	Moisture, heat, moist air and water
Hazardous Decomposition Products:	Nitrogen oxides (NOx), Samarium Oxides

10. Reactivity

Stability:	Hygroscopic. Stable under recommended storage settings.
Reacts With:	Combustible/organic materials
Incompatible Conditions:	Moisture, heat, moist air and water
Hazardous Decomposition Products:	Nitrogen oxides (NOx), Samarium Oxides

11. Toxicological Information

Potential Health Effects:

Eyes:	May cause irritation
Skin:	May cause irritation
Ingestion:	May cause irritation
Inhalation:	May cause respiratory irritation
Chronic:	N/A

Signs & Symptoms: N/A

Aggravated Medical Conditions: N/A

Median Lethal Dose: 2900 mg/kg for rat by mouth

Carcinogen: N/A

12. Ecological Information

Aquatic Toxicity: N/A

Persistent Bioaccumulation Toxicity: N/A

Very Persistent, Very Bioaccumulative: N/A

Notes: N/A

13. Disposal Considerations

Waste is classified as hazardous. Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous: Hazardous for transportation as powder only



Hazard Class: 5.1

Packing Group: II

UN Number: UN1477

Proper Shipping Name: Nitrates, inorganic, n.o.s. (Samarium (III) Nitrate Hexahydrate)

15. Regulatory Information

Sec 302 Extremely Hazardous: N/A

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: N/A

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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