



LTS Research Laboratories, Inc.
Safety Data Sheet
Beryllium Sulfate Tetrahydrate

1. Product and Company Identification

Trade Name: Beryllium Sulfate Tetrahydrate
Chemical Formula: $\text{BeSO}_4 \cdot 4\text{H}_2\text{O}$
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:

- H301: Toxic if swallowed
- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H319: Causes serious eye irritation
- H330: Fatal if inhaled
- H335: May cause respiratory irritation
- H350: May cause cancer by inhalation
- H372: Causes damage to organs through prolonged or repeated exposure
- H411: Toxic to aquatic life with long lasting effects

Precautionary Statements:

- P202: Do not handle until all safety precautions have been read and understood
- P260: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray
- P264: Wash face, hands, and any exposed skin thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P271: Use only outdoors or in a well-ventilated area
- P272: Contaminated work clothing must not be allowed out of the workplace
- P273: Avoid release to the environment
- P280: Wear protective gloves/ protective clothing/ eye protection/ face Protection
- P281: Use personal protective equipment as required
- P284: Wear respiratory protection
- P301 + P310 + P330: IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water

P304 + P340 + P310: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

P308 + P313: IF exposed or concerned: Get medical advice/ attention

P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention

P337 + P313: If eye irritation persists: Get medical advice/ attention

P362: Take off contaminated clothing and wash before reuse

P391: Collect spillage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed

P405: Store locked up

P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health:	4
Flammability:	0
Physical:	0

3. Composition

Chemical Family:

Ceramic, Sulfate

Additional Names:

None

Beryllium Sulfate Tetrahydrate ($\text{BeSO}_4 \cdot 4\text{H}_2\text{O}$):

Percentage:	100 wt%
CAS #:	7787-56-6
EC #:	236-842-2

4. First Aid Procedures

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None

Important Symptoms: N/A

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. 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
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
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:	0.0002 mg/m ³ as BeSO ₄ ·4H ₂ O, long-term value
Threshold Limit Value:	0.00005 mg/m ³ as BeSO ₄ ·4H ₂ O, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves Check gloves prior to each use
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	White
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	N/A
Melting Point:	550 - 600 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	1.713 g/cm ³
Molecular weight:	177.14 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
Incompatible Conditions:	N/A
Hazardous Decomposition Products:	N/A

11. Toxicological Information

Potential Health Effects:	
Eyes:	Causes serious eye irritation
Skin:	May cause an allergic skin reaction
Ingestion:	Toxic if swallowed
Inhalation:	Fatal if inhaled
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	LD50 Oral- 82 mg/kg for rat by mouth
Carcinogen:	May cause cancer by inhalation IARC: 1 - Group 1: Carcinogenic to humans (Beryllium sulphate tetrahydrate) NTP: (National Toxicity Program) Known - Known Carcinogen Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens ACGIH: (American Conference of Governmental Industrial Hygienists): A1 - Known Human Carcinogen

12. Ecological Information

Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:	Hazardous for transportation
	
Hazard Class:	6.1
Packing Group:	II
UN Number:	UN1566
Proper Shipping Name:	Beryllium compounds, n.o.s. (Beryllium Sulfate Tetrahydrate)

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	Yes

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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