

## LTS Research Laboratories, Inc. Safety Data Sheet Holmium Oxide

|  | 1. Product and Company Identification   |
|--|---|
| Trade Name:                                      | Holmium oxide   |
| Chemical Formula:                                | Ho <sub>2</sub> O <sub>3</sub>  |
| 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:                                     | None  |
| Hazard Statements:                               | None  |
| Precautionary Statements:                        | None  |
|  | - Research  |
| HMIS Health Ratings (0-4):                       | in the second |
| Health:  |   |
| Flammability:                                    | 0   |
| Physical:  | 1   |
|  | 3. Composition  |
| Chemical Family:                                 | Rare Earth  |
| Additional Names:                                | None  |
| Holmium oxide (Ho <sub>2</sub> O <sub>3</sub> ): |   |
| Percentage:                                      | 100 wt%   |
| CAS #:   | 12055-62-8  |
| EC #:  | 235-015-3   |
|  | 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.  |
| Ingestion:                                       | Seek Medical Attention.   |
| Skin:  | Wash affected area with mild soap and water. Remove any   |
|  | contaminated clothing.  |
| Eyes:  | Flush eyes with water, blinking often for several minutes. Remove   |
|  | contact lenses if present and easy to do. Continue rinsing  |

|   | 5. Firefighting Measures  |
|---|---|
|   | Non-flammable   |
| Extinguishing Media:  | No special restrictions – use suitable extinguishing agent for            |
|   | surrounding material and type of fire.                                    |
| 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.  |
|   | G-Research  |
| 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:  | Rubber gloves   |
| 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   | Beige   |
| Form:   | Powder, Granules  |
| Odor:   | Odorless  |
| Water Solubility:   | Insoluble   |
|   | 3900 °C   |
| Boiling Point:  | 2330 °C   |
|   | 2330 C  |
| Melting Point:  | N/A   |
| Boiling Point:<br>Melting Point:<br>Flash Point:<br>Autoignition Temperature: |   |
| Melting Point:<br>Flash Point:  | N/A   |

|   | 10. Reactivity                              |  |
|---|---|--|
| Stability:                                  | Stable under recommended storage conditions |  |
| Reacts With:                                | Strong oxidizing agents, Strong acids       |  |
| Incompatible Conditions:                    | Avoid moisture                              |  |
| Hazardous Decomposition Products:           | Metal oxide fume                            |  |
|   | 11. Toxicological Information               |  |
| Potential Health Effects:                   |   |  |
| Eyes:                                       | May cause irritation                        |  |
| Skin:                                       | May cause irritation                        |  |
| Ingestion:                                  | May cause irritation                        |  |
| Inhalation:                                 | May cause irritation                        |  |
| Chronic:                                    | N/Å   |  |
| Signs & Symptoms:                           | N/A   |  |
| Aggravated Medical Conditions:              | N/A   |  |
| Median Lethal Dose:                         | N/A   |  |
| Carcinogen:                                 | N/A   |  |
|   | 12. Ecological Information                  |  |
| Aquatic Toxicity:                           | Low   |  |
| Persistent Bioaccumulation Toxicity:        | No  |  |
| Very Persistent, Very Bioaccumulative:      | No  |  |
| Notes:                                      | N/A Berparch                                |  |
|   |   |  |
|   | 13. Disposal Considerations                 |  |
| Dispose of in accordance with local, state, | national, and international regulations.    |  |
|   | 14. Transportation Data                     |  |
| Hazardous:                                  | Not hazardous for transportation.           |  |
| Hazard Class:                               | N/A   |  |
| Packing Group:                              | N/A   |  |
| UN Number:                                  | N/A   |  |
| Proper Shipping Name:                       | N/A   |  |
|   | 15. Regulatory Information                  |  |
| Sec 302 Extremely Hazardous:                | No  |  |
| Sec 304 Reportable Quantities:              | N/A   |  |
| Sec 313 Toxic Chemicals:                    | No  |  |

## 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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