

1 Identification Product identifier

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| Product name: Lanthanum(III) hydroxide   |                    |
|--|--------------------|
| Stock number: 43123  |                    |
| CAS Number:<br>14507-19-8  |                    |
| EC number:<br>238-510-2  |                    |
| Relevant identified uses of the substance or mixture and uses advised against.<br>Identified use: SU24 Scientific research and development   |                    |
| Details of the supplier of the safety data sheet<br>Manufacturer/Supplier:<br>Alfa Aesar   |                    |
| Alfa Aesar<br>Thermo Fisher Scientific Chemicals, Inc.<br>30 Bond Street<br>Ward Hill, MA 01835-8099<br>Tel: 800-343-0660<br>Fax: 800-322-4757<br>Email: tech@alfa.com   |                    |
| So Bond Street<br>Ward Hill, MA 01835-8099   |                    |
| Fax: 800-322-4757  |                    |
|  |                    |
| Information Department: Health, Safety and Environmental Department<br>Emergency telephone number:   |                    |
| During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0   | 0789.              |
| 2 Hazard(s) identification   |                    |
| Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)   |                    |
| GHS07  |                    |
| Skin Irrit. 2 H315 Causes skin irritation.   |                    |
| Eye Irrit. 2A H319 Causes serious eye irritation.<br>STOT SE 3 H335 May cause respiratory irritation.<br>Hazards not otherwise classified No information known.  |                    |
| Hazards not otherwise classified No information known.   |                    |
| GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms   |                    |
|  |                    |
| GHS07  |                    |
|  |                    |
| Signal word Warning<br>Hazard statements<br>H315 Causes skin irritation.   |                    |
| H319 Causes serious eye irritation.<br>H335 May cause respiratory irritation.<br><b>Precautionary statements</b>   |                    |
| Precautionary statements   |                    |
| P261 Avoid breathing dust/fume/gas/mist/vapours/spray.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P405 P405 P405 P405 P405 P405 P405 P405 |                    |
| P303+P351+P338 IF IN E1ES. Rinse cautously with water for several minutes. Remove contact lenses, it present and easy to do. Continue mising<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.   | <i>].</i>          |
| P405 Store locked up.<br>P501 Dispose of contents/container in accordance with local/regional/national/international regulations.  |                    |
| WHMIS classification<br>D2B - Toxic material causing other toxic effects   |                    |
|  |                    |
|  |                    |
| Classification system<br>HMIS ratings (scale 0-4)<br>(Hazardous Materials Identification System)   |                    |
| (Hazardous Materials Identification System)<br>HEALTH 1 Health (acute effects) = 1   |                    |
| Interminability = 0   REACTWITY I   Physical Hazard = 1  |                    |
| Other hazards  |                    |
| Results of PBT and vPvB assessment<br>PBT: Not applicable.   |                    |
| vPvB: Not applicable.  |                    |
| 3 Composition/information on ingredients   |                    |
| Chemical characterization: Substances<br>CAS# Description:   |                    |
| 14507-19-8 Lanthanum(III) hvdroxide  |                    |
| Identification number(s):<br>EC number: 238-510-2  |                    |
| 4 First-aid measures   |                    |
| Description of first aid measures  |                    |
| After inhalation<br>Supply fresh air. If required, provide artificial respiration. Keep patient warm.  |                    |
| Seek îmmediate medical advice.<br>After skin contact   |                    |
| Immediately wash with water and soap and rinse thoroughly.   | (Contd. on page 2) |
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| Product name: L | .anthanum(III) | hydroxide |
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| After swallowing Seek medical treatment<br>Information for doctor<br>Most important symptoms and effects  | r several minutes under running water. Then consult a doctor.<br>nt.<br><b>s, both acute and delayed</b> No further relevant information available.<br><b>attention and special treatment needed</b> No further relevant information available.  | (Contd. of page 1) |
| 5 Fire-fighting measures<br>Extinguishing media<br>Suitable extinguishing agents Product<br>Special hazards arising from the subs<br>If this product is involved in a fire, the foll<br>Metal oxide fume<br>Advice for firefighters<br>Protective equipment:<br>Wear self-contained respirator.<br>Wear fully protective impervious suit.   | t is not flammable. Use fire-fighting measures that suit the surrounding fire.<br><b>stance or mixture</b><br>llowing can be released:   |                    |
| 6 Accidental release measures<br>Personal precautions, protective equip<br>Wear protective equipment. Keep unprot<br>Ensure adequate ventilation<br>Environmental precautions: Do not allo<br>Methods and material for containment<br>Prevention of secondary hazards: No<br>Reference to other sections<br>See Section 7 for information on safe hal<br>See Section 8 for information on persona<br>See Section 13 for disposal information. | tected persons away. The sevage system or any water course.<br>Iow product to reach sewage system or any water course.<br>It and cleaning up: Ensure adequate ventilation.<br>Special measures required.<br>Indling<br>al protection equipment.  |                    |
| Conditions for safe storage, including<br>Storage<br>Requirements to be met by storeroom  | e.<br>explosions and fires: The product is not flammable<br>g any incompatibilities<br>ns and receptacles: No special requirements.<br>Imon storage facility: Store away from oxidizing agents.<br>Inditions:  |                    |
| Control parameters<br>Components with limit values that req<br>The product does not contain any releval   | of technical systems:<br>designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.   |                    |
| Protection of hands:<br>Impervious gloves   | andling chemicals should be followed.<br>and feed.<br>thing immediately.<br>nd of work.<br>vorking environment.<br>pirator when high concentrations are present.<br>pirator when high concentrations are present.<br>e for their proper condition.<br>depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.<br><b>minutes)</b> Not determined |                    |
| ••  |  |                    |
| 9 Physical and chemical properties<br>Information on basic physical and che<br>General Information<br>Appearance:   | emical properties  |                    |
| Form:<br>Color:   | Powder<br>White  |                    |
| Odor:<br>Odor threshold:  | Odorless<br>Not determined.  |                    |
| pH-value:   | Not applicable.  |                    |
| Change in condition<br>Melting point/Melting range:<br>Boiling point/Boiling range:<br>Sublimation temperature / start:<br>Flammability (solid, gaseous)<br>Ignition temperature:   | Decomposes<br>Not determined<br>Not determined<br>Not determined.<br>Not determined  | (Contd. on page 3) |
|   |  | USA USA            |

## Product name: Lanthanum(III) hydroxide

| Product name: Lanthanum(III) hydro  | )XIDE   |                    |
|---|---|--------------------|
|   |   | (Contd. of page 2) |
| Decomposition temperature:<br>Auto igniting:  | Not determined<br>Not determined.   |                    |
| Danger of explosion:  | Not determined.   |                    |
| Explosion limits:   |   |                    |
| Lower:<br>Upper:  | Not determined<br>Not determined  |                    |
| Vapor pressure:   | Not applicable.<br>Not determined   |                    |
| Density:<br>Relative density  | Not determined.   |                    |
| Vapor density<br>Evaporation rate   | Not applicable.<br>Not applicable.  |                    |
| Solubility in / Miscibility with  |   |                    |
| Water:<br>Partition coefficient (n-octanol/water)                                   | Soluble<br>): Not determined.   |                    |
| Viscosity:  |   |                    |
| dynamic:<br>kinematic:  | Not applicable.<br>Not applicable.  |                    |
| Other information   | No further relevant information available.  |                    |
| 10 Stability and reactivity   |   |                    |
| Reactivity No information known.  |   |                    |
| Chemical stability Stable under recom   | mended storage conditions.  |                    |
| <b>Possibility of hazardous reactions</b> Re  | to be avoided: Decomposition will not occur if used and stored according to specifications.<br>eacts with strong oxidizing agents |                    |
| Conditions to avoid No further relevan<br>Incompatible materials: Oxidizing age     | nt information available.   |                    |
| Hazardous decomposition products:   | Metal oxide fume  |                    |
| 11 Toxicological information  |   |                    |
| Information on toxicological effects  |   |                    |
| Acute toxicity: No effects known.   | • •••• •• •• • • • • • • • • • • • • •  |                    |
| LD/LC50 values that are relevant for of<br>Skin irritation or corrosion: Causes sh  |   |                    |
| Eye irritation or corrosion: Causes se  | erious eye irritation.  |                    |
| Sensitization: No sensitizing effects kn<br>Germ cell mutagenicity: No effects kno  | OWN.<br>own   |                    |
| Carcinogenicity: No classification data   | on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.                                  |                    |
| Reproductive toxicity: No effects know<br>Specific target organ system toxicity     | <b>- repeated exposure:</b> No effects known.   |                    |
| Specific target organ system toxicity   | - single exposure: May cause respiratory irritation.  |                    |
| Aspiration hazard: No effects known.<br>Subacute to chronic toxicity: No effect     | sts known.  |                    |
| Additional toxicological information:   | To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.                                 |                    |
| 12 Ecological information   |   |                    |
| Toxicity  |   |                    |
| Aquatic toxicity: No further relevant inf<br>Persistence and degradability No furth | formation available.<br>her relevant information available  |                    |
| Bioaccumulative potential No further i  | relevant information available.   |                    |
| Mobility in soil No further relevant infor<br>Additional ecological information:    | rmation available.  |                    |
| General notes:  | mustifies to weak around water water equipe or equiped an equipter  |                    |
| Avoid transfer into the environment.  | quantities to reach ground water, water course or sewage system.  |                    |
| <b>Results of PBT and vPvB assessmen</b><br><b>PBT:</b> Not applicable.             | it i  |                    |
| vPvB: Not applicable.   | · · · · · · · · · · · · · · · · · · ·   |                    |
| Other adverse effects No further releva   | ant information available.  |                    |
| 13 Disposal considerations  |   | _                  |
| Waste treatment methods   | a a constante de la constante d                   |                    |
| Recommendation Consult state, local of<br>Uncleaned packagings:                     | or national regulations to ensure proper disposal.  |                    |
| Recommendation: Disposal must be m  | nade according to official regulations.   |                    |
| Recommended cleansing agent: Wate   | er, it necessary with cleansing agents.   |                    |
| 14 Transport information  |   |                    |
| UN-Number<br>DOT, ADN, IMDG, IATA   | Not applicable  |                    |
| UN proper shipping name   |   |                    |
| DOT, ADN, IMDG, IATA  | Not applicable  |                    |
| Transport hazard class(es)  |   |                    |
| DOT, ADR, ADN, IMDG, IATA<br>Class  | Not applicable  |                    |
| Packing group   |   |                    |
| DOT, IMDG, IATA   | Not applicable  |                    |
| Environmental hazards:  | Not applicable.<br>Not applicable.  |                    |
| Special precautions for user<br>Transport in bulk according to Annex                | Not applicable.<br>x II of MARPOL73/78 and the IBC Code Not applicable.   |                    |
| Transport in bulk according to Annex<br>Transport/Additional information:           |   |                    |
| DOT   |   |                    |
| Marine Pollutant (DOT):   | No  |                    |
|   |   | (Contd. on page 4) |

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| UN "Model Regulation": -  |  |
| Regulatory information  |  |
| Safety, health and environmental regulations/legislation specific for the substance or mixture<br>GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)<br>Hazard pictograms   |  |
| ()  |  |
| GHS07   |  |
| Signal word Warning     Hazard statements     H315 Causes skin irritation.     H319 Causes serious eye irritation.     H319 Causes respiratory irritation.     H325 May cause respiratory irritation.     Precautionary statements     P261   Avoid breathing dust/fume/gas/mist/vapours/spray.     P280   Wear protective gloves/protective clothing/eye protection/face protection.     P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and eas     P304+P340   IF INHALED: Remove person to fresh air and keep comfortable for breathing.     P405   Store locked up.     P501   Dispose of contents/container in accordance with local/regional/national/international regulations.   | y to do. Continue rinsing.               |
| National regulations<br>All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemic<br>All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).<br>SARA Section 313 (specific toxic chemical listings) Substance is not listed.<br>California Proposition 65<br>Prop 65 - Developmental toxicity Substance is not listed.<br>Prop 65 - Developmental toxicity, female Substance is not listed.<br>Prop 65 - Developmental toxicity, female Substance is not listed.<br>Prop 65 - Developmental toxicity, male Substance is not listed.<br>Prop 65 - Developmental toxicity, male Substance is not listed.<br>Prop 65 - Developmental toxicity, male Substance is not listed.<br>Information about limitation of use: For use only by technically qualified individuals.<br>Other regulations, limitations and prohibitive regulations<br>Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not<br>The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH),<br>market and use must be observed.<br>Substance is not listed.<br>Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.<br>Chemical safety assessment: A Chemical Safety Assessment has not been carried out. | listed.                                  |
| <b>Other information</b><br>Employers should use this information only as a supplement to other information gathered by them, and should make indep<br>information to ensure proper use and protect the health and safety of employees. This information is furnished without war<br>conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility   | ranty, and any use of the product not ir |
| Department issuing SDS: Global Marketing Department<br>Date of preparation / last revision 11/24/2015 / -<br>Abbreviations and acronyms:<br>ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Good<br>DOT: US Department of Transportation<br>ENIECS: European Inventory of Existing Commercial Chemical Substances<br>CAS: Chemical Abstracts Service (division of the American Chemical Society)<br>HMIS: Hazardous Materials Identification System (USA)<br>WHMIS: Workplace Hazardous Materials Information System (Canada)<br>LC50: Lethal concentration, 50 percent<br>LD50: Lethal dose, 50 percent<br>VPWB: very Persistent and very Bioaccumulative<br>ACGIH: American Conference of Governmental Industrial Hygienists (USA)<br>OSHA: Occupational Safety and Health Administration (USA)<br>NTP: National Toxicology Program (USA)<br>IARC: International Agency for Research on Cancer<br>EPA: Environmental Protection Agency (USA)  |  |