

## 1. Identification

|   |  |                       |
|---|--|-----------------------|
| <b>Product identifier</b>                                     | <b>LANTHANUM CHLORIDE, HEPTAHYDRATE, 99.99%</b>  |                       |
| <b>Other means of identification</b>                          |  |                       |
| <b>Product code</b>   | A4042  |                       |
| <b>CAS number</b>   | 10025-84-0   |                       |
| <b>Recommended use</b>  | professional, scientific and technical activities: other professional, scientific and technical activities |                       |
| <b>Recommended restrictions</b>                               | None known.  |                       |
| <b>Manufacturer/Importer/Supplier/Distributor information</b> |  |                       |
| <b>Manufacturer</b>   |  |                       |
| <b>Company name</b>   | GFS Chemicals, Inc.  |                       |
| <b>Address</b>  | P.O. Box 245<br>Powell, OH 43065<br>United States  |                       |
| <b>Telephone</b>  | Phone  | 740-881-5501          |
|   | Toll Free  | 800-858-9682          |
|   | Fax  | 740-881-5989          |
| <b>Website</b>  | www.gfschemicals.com   |                       |
| <b>E-mail</b>   | service@gfschemicals.com   |                       |
| <b>Emergency phone number</b>                                 | Emergency Assistance   | Chemtrec 800-424-9300 |

## 2. Hazard(s) identification

|                              |   |   |
|------------------------------|---|---|
| <b>Physical hazards</b>      | Not classified.                                 |   |
| <b>Health hazards</b>        | Skin corrosion/irritation                       | Category 2                              |
|                              | Serious eye damage/eye irritation               | Category 2A                             |
|                              | Sensitization, skin                             | Category 1                              |
|                              | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| <b>Environmental hazards</b> | Not classified.                                 |   |
| <b>OSHA defined hazards</b>  | Not classified.                                 |   |
| <b>Label elements</b>        |   |   |



|  |  |
|--|--|
| <b>Signal word</b>                               | Warning  |
| <b>Hazard statement</b>                          | Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation.  |
| <b>Precautionary statement</b>                   |  |
| <b>Prevention</b>                                | Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.   |
| <b>Response</b>                                  | IF ON SKIN: Wash with plenty of soap and water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Wash hands after handling. |
| <b>Storage</b>                                   | Store in a well-ventilated place. Keep container tightly closed. Store locked up.  |
| <b>Disposal</b>                                  | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.   |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.  |
| <b>Supplemental information</b>                  | None.  |

### 3. Composition/information on ingredients

#### Substances

| Chemical name                       | Common name and synonyms | CAS number | %   |
|-------------------------------------|--------------------------|------------|-----|
| LANTHANUM CHLORIDE,<br>HEPTAHYDRATE |                          | 10025-84-0 | 100 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.   |
| <b>Skin contact</b>   | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.                   |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.   |
| <b>Ingestion</b>  | Rinse mouth. Do not use mouth-to-mouth method if victim ingested the substance. Get medical attention if symptoms occur.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| <b>General information</b>  | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.          |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Use extinguishing agent suitable for type of surrounding fire.                                |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | None known.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Use water spray to cool unopened containers.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted.   |

### 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.   |
| <b>Methods and materials for containment and cleaning up</b>               | Prevent entry into waterways, sewers, basements or confined areas. Avoid dust formation. This product is miscible in water.<br><br>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Sweep or scoop up and remove. Following product recovery, flush area with water.<br><br>Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.<br><br>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.   |

## 7. Handling and storage

**Precautions for safe handling** Use only with adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store locked up. Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

**Occupational exposure limits** This substance has no PEL, TLV, or other recommended exposure limit.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear chemical goggles.

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.

**Form** Crystalline. Solid.

**Color** White.

**Odor** Odorless.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** 194 °F (90 °C) (loses water)

**Initial boiling point and boiling range** Not available.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Very soluble.

**Partition coefficient (n-octanol/water)** Not available.

|                                  |                                      |
|----------------------------------|--------------------------------------|
| <b>Auto-ignition temperature</b> | Not available.                       |
| <b>Decomposition temperature</b> | Not available.                       |
| <b>Viscosity</b>                 | Not available.                       |
| <b>Other information</b>         |                                      |
| <b>Explosive properties</b>      | Not explosive.                       |
| <b>Molecular formula</b>         | LaCl <sub>3</sub> .7H <sub>2</sub> O |
| <b>Molecular weight</b>          | 371.37                               |
| <b>Oxidizing properties</b>      | Not oxidizing.                       |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | None known. Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | None known.   |
| <b>Hazardous decomposition products</b>   | Hydrogen chloride.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation to the respiratory system.              |
| <b>Skin contact</b> | Causes skin irritation. May cause an allergic skin reaction. |
| <b>Eye contact</b>  | Causes serious eye irritation.                               |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.                       |

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

|  |                                |
|--|--------------------------------|
| <b>Acute toxicity</b>                    | Not known.                     |
| <b>Skin corrosion/irritation</b>         | Causes skin irritation.        |
| <b>Serious eye damage/eye irritation</b> | Causes serious eye irritation. |

### Respiratory or skin sensitization

|                                  |                                      |
|----------------------------------|--------------------------------------|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer.        |
| <b>Skin sensitization</b>        | May cause an allergic skin reaction. |

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

### US OSHA Hazard Categories (1)

Not regulated.

### US OSHA Hazard Categories (10)

Not regulated.

### US OSHA Hazard Categories (2)

Not regulated.

### US OSHA Hazard Categories (3)

Not regulated.

### US OSHA Hazard Categories (4)

Not regulated.

### US OSHA Hazard Categories (5)

Not regulated.

### US OSHA Hazard Categories (6)

Not regulated.

### US OSHA Hazard Categories (7)

Not regulated.

### US OSHA Hazard Categories (8)

Not regulated.

### US OSHA Hazard Categories (9)

Not regulated.

### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product   | Species | Test Results                  |                       |
|---|---------|-------------------------------|-----------------------|
| LANTHANUM CHLORIDE, HEPTAHYDRATE (CAS 10025-84-0) |         |                               |                       |
| <b>Aquatic</b>                                    |         |                               |                       |
| Crustacea   | EC50    | Water flea (Daphnia carinata) | 0.0432 mg/l, 48 hours |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** None known.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**US OSHA Hazard Categories (1)**

Not regulated.

**US OSHA Hazard Categories (2)**

Not regulated.

**US OSHA Hazard Categories (3)**

Not regulated.

**US OSHA Hazard Categories (4)**

Not regulated.

**US OSHA Hazard Categories (5)**

Not regulated.

**US OSHA Hazard Categories (6)**

Not regulated.

**US OSHA Hazard Categories (7)**

Not regulated.

**US OSHA Hazard Categories (8)**

Not regulated.

**US OSHA Hazard Categories (9)**

Not regulated.

**US OSHA Hazard Categories (10)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

|                          |                        |
|--------------------------|------------------------|
| <b>Hazard categories</b> | Immediate Hazard - Yes |
|                          | Delayed Hazard - No    |
|                          | Fire Hazard - No       |
|                          | Pressure Hazard - No   |
|                          | Reactivity Hazard - No |

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312** No**Hazardous chemical****SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

| <b>Country(s) or region</b> | <b>Inventory name</b>  | <b>On inventory (yes/no)*</b> |
|-----------------------------|--|-------------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                           |
| Canada                      | Domestic Substances List (DSL)   | Yes                           |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                            |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                           |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                           |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                            |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                           |
| Korea                       | Existing Chemicals List (ECL)  | Yes                           |
| New Zealand                 | New Zealand Inventory  | Yes                           |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                           |

| <b>Country(s) or region</b> | <b>Inventory name</b>                         | <b>On inventory (yes/no)*</b> |
|-----------------------------|---|-------------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes                           |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** December-23-2014

**Revision date** February-23-2017

**Version #** 02

**Disclaimer** GFS Chemicals, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.