Material Safety Data Sheet
Lanthanum oxide

Section 1 - Chemical Product and Company Identification

MSDS Name:
Lanthanum oxide

Catalog Numbers:
Q04061

Synonyms:
Lanthanum sesquioxide, lanthanum trioxide, lanthanum (III) oxide.

Company Identification:
Qorpak
1195 Washington Pike
Bridgeville, PA 15017

Company Phone Number:
(412) 257-3100

Emergency Phone Number:
(800) 424-9300

CHEMTREC Phone Number:
(800) 424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1312-81-8</td>
<td>Lanthanum oxide</td>
<td>100%</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

**Appearance:** white to off-white powder

**Warning!** Causes eye irritation.

**Target Organs:** Eyes.

Potential Health Effects

**Eye:**
Causes eye irritation.

**Skin:**
May cause skin irritation.

**Ingestion:**
May cause gastrointestinal irritation.

**Inhalation:**
May cause respiratory tract irritation.

**Chronic:**
No information found.
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Section 4 - First Aid Measures

**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

**Skin:**
Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops.

**Ingestion:**
Do not induce vomiting unless directed to do so by qualified medical personnel. Get medical aid at once.

**Inhalation:**
Give artificial respiration if necessary. Move victim to fresh air. Keep victim warm and at rest. Get medical aid at once.

**Notes to Physician:**
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information:**
Substance is non-combustible. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

**Autoignition Temperature:**
No information found.

**Flash Point:**
No information found.

**NFPA Rating:**
Health-1; flammability-0; reactivity-0

**Explosion Limits:**
Lower: n/a  Upper: n/a

Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Vacuum or sweep up material and place into a suitable disposal container. Avoid creating airborne particles. Provide ventilation.
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Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:
Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanthanum oxide</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Calcium carbonate: No OSHA Vacated PELs are listed.

Personal Protective Equipment

Eyes:
Do not wear contact lenses when working with chemicals. Wear appropriate protective eyeglasses or chemical safety goggles as described in 29 CFR 1910.133.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>White to off-white</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Negligible</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Negligible</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>4200°C</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>2315°C</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>Not available</td>
</tr>
</tbody>
</table>
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Solubility in water: Insoluble
Specific Gravity/Density: 6.51 g/cm³
Molecular Formula: La₂O₃
Molecular Weight: 325.81

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal storage and handling conditions. Absorbs carbon dioxide from the air.

Conditions to Avoid:
Dust generation, prolonged exposure to air.

Incompatibilities with Other Materials:
Acids.

Hazardous Decomposition Products:
Lanthanum carbonate.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 1312-81-8: OE5330000

LD₅₀/LC₅₀:
CAS# 1312-81-8:
Draize test, rabbit, eye: 100 mg Mild;
Oral, mouse: LD₅₀ = 2450 mg (La)/Kg;
Oral, rat: LD₅₀ = >8500 mg (La)/Kg.

Carcinogenicity:
CAS# 1312-81-8: Not listed by ACGIH, IARC, NTP, or CA Proposition 65.

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive:
No information available.

Mutagenicity:
No information available.

Neurotoxicity:
No information available.

Section 12 - Ecological Information

No information found.
Section 13 - Disposal Considerations
Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated.
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 1312-81-8 is listed on the TSCA inventory. Does not have a Significant New Use Rule.
SARA Reportable Quantities (RQ):
CAS# 1312-81-8 does not have a RQ.
CERCLA/SARA Section 313:
Not reportable under Section 313.
OSHA - Highly Hazardous:
Not considered highly hazardous by OSHA.

US State
State Right to Know:
CAS# 1312-81-8 is not listed on the following state right to know lists: Pennsylvania, Minnesota, California, Florida, New Jersey, or Massachusetts.

California Regulations:
Not listed.

European/International Regulations

Canadian DSL/NDSL:
CAS# 1312-81-8 is listed on Canada’s DSL List.
Canada Ingredient Disclosure List:
CAS# 1312-81-8 is not listed on the Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: August 1, 2006
Revision Date: None

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