

# SAFETY DATA SHEET

## Inland Polishing Compound



SDS No: 50037  
Revision Date: 03/25/2014  
Version: 2.0

This SDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Inland Polishing Compound

**Other identifiers:** Cerium Oxide Polishing Compound, Rare Earth Oxide Polishing Compound, Inland Product Number: 50037

**Recommended use:** Polishing glass; remove light scratches from glass surfaces and mirror; polishing a wide variety of minerals, lapidary, and jewelry items.

**Manufacturer**  
Inland Craft Products, Co.  
32052 Edward Dr.  
Madison Heights, MI 48071  
USA  
Telephone: (248) 583-7150  
Website: www.inlandcraft.com

**Emergency telephone numbers**  
(248) 583-7150  
Monday-Friday, 8:00 am - 5:00 PM EST

**Medical Emergencies:**  
(800) 222-1222 (Poison Control in USA)  
911

### SECTION 2 - HAZARDS IDENTIFICATION

**Physical Hazard:** Product dust may be irritating to eyes, skin and respiratory system.  
Caution: Avoid dust formation.

**Color:** Reddish tan

**Physical State:** Powder

**Odor:** None

**Health Hazards**

- Eye** May cause eye irritation, burning, tearing or redness.
- Skin** May be mildly irritating to skin.
- Ingestion** May irritate digestive tract.
- Inhalation** May cause upper respiratory irritation, shortness of breath, or coughing.

**HMIS Classification**

Health hazards	1
Flammability	0
Physical hazards	0

**NFPA Rating**

Health hazards	0
Fire	0
Reactivity hazards	0

## SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS

### Hazardous Ingredients

COMPONENT	OTHER NAMES	CAS	EC-No.	%
Cerium Oxide	Ceric oxide, Ceria	1306-38-3	215-150-4	>54%
Lanthanum Oxide	Lanthanum(III) oxide	1312-81-8	215-200-5	<31%

Ingredients not precisely identified are proprietary or non-hazardous. All ingredients appear on the EPA TSCA inventory. Values are not product specifications.

## SECTION 4 - FIRST-AID MEASURES

<b>Eye Contact</b>	Flush with plenty of water. Consult a physician if irritation persists.
<b>Skin Contact</b>	Wash affected area with soap and large amounts of water.
<b>Inhalation</b>	Remove victim to fresh air, apply artificial respiration if needed, and get medical attention promptly if distress occurs.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Drink large amounts of water. Get medical attention promptly.
<b>Notes to Physician</b>	Lanthanides, because of their density, can produce abnormalities on chest X-Ray. Lanthanides generally are not felt to be fibrogenic, and the lesions typically have little or no clinical significance. However, occasional cases of pneumoconiosis have been reported.

## SECTION 5 - FIRE FIGHTING MEASURES

<b>Flammable Properties</b>	Not flammable or combustible.
<b>Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Other Hazards</b>	Hazardous decomposition products formed under fire conditions. - cerium oxides, Lanthanum oxides.
<b>Fire Fighting Procedures</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid dust formation. Avoid breathing vapours, mist or gas.
<b>Steps for Clean-up</b>	Sweep up and shovel. Keep in suitable, closed containers for disposal.
<b>Environmental</b>	Do not let product enter drains.

## SECTION 7 - HANDLING AND STORAGE

<b>Handling</b>	Provide appropriate exhaust ventilation at places where dust is formed.
<b>Storage</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Airborne Exposure Limits

COMPONENT	CAS	OSHA PEL	ACGIH TLV	NIOSH REL
Cerium Oxide	1306-38-3	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	None listed
Lanthanum Oxide	1312-81-8	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	None listed

**Engineering Controls** Provide enough ventilation to minimize any dust or vapor inhalation.

### Personal Protection

#### Respiratory

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Eye

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin

Nitrile rubber or equivalent rubber gloves, if needed to avoid prolonged contact.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

	Cerium Oxide (CAS 1306-38-3)	Lanthanum Oxide (CAS 1312-81-8)
<b>Appearance</b>		
Physical State	Powder	Powder
Color	Red brown	White
Odor	odorless	odorless
<b>Safety Data</b>		
pH	NO DATA	NO DATA
Melting point / freezing Point	> 752 °F (> 400°C)	4,181- 4,191 °F (2,305 - 2,315°C)
Initial boiling point / boiling range	> 752 °F (> 400°C)	7,592 °F (4,200 °C)
Flash point	NO DATA	NO DATA
Auto ignition temperature	> 752 °F (> 400°C)	
Evaporation rate (Butyl Acetate=1)	NO DATA	NO DATA
Lower explosive limit	NO DATA	NO DATA
Upper explosive limit	NO DATA	NO DATA
Vapor pressure	NO DATA	NO DATA
Density (Air=1)	7.13 g/mL at 77 °F (25 °C)	6.51 g/cm <sup>3</sup> at 77 °F (25 °C)
Solubility in water	Insoluble	0.00007 g/l at 68 °F (20 °C) Insoluble
Partition coefficient (n-octanol/water)	NO DATA	NO DATA
Relative vapor density	NO DATA	NO DATA
Odor threshold	NO DATA	NO DATA
Evaporation rate	NO DATA	NO DATA
<b>Other Information</b>		
Molecular formula	CeO <sub>2</sub>	La <sub>2</sub> O <sub>3</sub>
Molecular weight	172.11 g/mol	325.81 g/mol

## SECTION 10 - STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	None known.
<b>Incompatible Materials</b>	None known.
<b>Hazardous Decomposition Products</b>	Under fire conditions. - Cerium oxides, Lanthanum oxides. Other decomposition products - no data available.
<b>Hazardous Polymerization</b>	None has not been reported.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin contact	May cause skin irritation.
Eye contact	May cause eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalation of rare earths may cause sensitivity to heat, itching, and increased awareness of odor and taste. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Information on toxicological effects:

#### Acute toxicity

Method	Species	Results Cerium Oxide	Results Lanthanum Oxide
Oral	Rat	LD50 = > 5,000mg/Kg	LD50 = > 10,000 mg/kg
Inhalation	Rat	LC50 = > 5.05 mg/L/4H	LC50 = 5.3 mg/L/4H
Dermal	Rat	LD50 = > 2,000 mg/Kg	no data available

<b>Skin corrosion/irritation</b>	Skin - rabbit - No skin irritation - 4 h - OECD Test Guideline 404.
<b>Serious eye damage/irritation</b>	Eyes - rabbit - Mild eye irritation - OECD Test Guideline 405.
<b>Respiratory sensitization</b>	Guinea pig - Does not cause skin sensitisation. - Maximisation Test.
<b>Germ cell mutagenicity</b>	Genotoxicity in vitro - Ames test - S. typhimurium - with and without metabolic activation - negative.
<b>Carcinogenic effects</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>Reproductive toxicity</b>	no data available
<b>Mutagenic effects</b>	no data available.
<b>Specific target organ toxicity - single exposure</b>	no data available
<b>Specific target organ toxicity - repeated exposure</b>	no data available
<b>Aspiration hazard</b>	no data available
<b>Synergistic effects</b>	no data available

## SECTION 12 - ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish	Semi-static test EC50 - Danio rerio (zebra fish) - > 200 mg/l - 72 h
Toxicity to daphnia and other aquatic invertebrates	Immobilization EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h. Method: OECD Test Guideline 202
Toxicity to bacteria	EC50 - Sludge Treatment - > 1,000 mg/l - 3 h

<b>Persistence and biodegradation</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	No data available

## SECTION 13 - DISPOSAL CONSIDERATIONS

Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14 - TRANSPORT INFORMATION

<b>DOT (US)</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>IATA</b>	Not dangerous goods

## SECTION 15 - REGULATORY INFORMATION

<b>OSHA Hazards</b>	Target Organ Effect for Cerium Oxide component. Material contains very low levels of naturally occurring radioactive Material (NORM) present in the rare earth raw materials. Chronic Health Hazard Hazard under OSHA HazCom Standard 1910.1200.
<b>SARA 302 Components</b>	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
<b>SARA 313 Components</b>	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
<b>SARA 311/312 Hazards</b>	No SARA Hazards.
<b>States Right to Know Components</b>	Can be found on the following state right to know lists: New Jersey, Pennsylvania.
<b>US. California Proposition 65</b>	This product may contain the following substances known to the State of California to cause cancer and/or reproductive harm: Radionuclides (cancer).

## SECTION 16 - OTHER INFORMATION

### **Manufacturer Disclaimer:**

The information and recommendations contained in this Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. Judgement of potential hazards of this product is based on information available about individual components listed in Section 3 - Ingredients. Direct testing of this mixture has not been done. The information given herein is believed to be accurate and is given in good faith, is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. However, no warranty is either expressed or implied. This company shall not be held liable for any damage resulting from handling or from contact with the above. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.