

**MATERIAL SAFETY DATA SHEET**

**Company Name:** C.R. LAURENCE CO., INC.  
**Address:** 2503 E. VERNON AVE.  
**City / State / Zip:** LOS ANGELES / CA / 90058  
**US-CHEMTREC Phone(I):** (800)424-9300  
**US-CHEMTREC Phone(II):** (703)527-3887  
**CAN-CANUTEC Phone:** (613)996-6666  
**Vendor Update:** 12/31/2010  
**Date Prepared:** 5/21/2013  
**MSDS Number:** C0301 ; C0305 ; C0310 ; C0453 ;

**I. CHEMICAL PRODUCT IDENTIFICATION**

**Product Name:** CERIUM OXIDE  
**HMIS Ratings:**  
 Health: Slight(1)  
 Flammability: Minimal(0)  
 Instability/Reactivity: Minimal(0)  
 Personal Protective Equipment: X (Chronic)

**NFPA Ratings:**

**Other:** EMERGENCY OVERVIEW:  
 Cerium Oxide is on the EPA Toxic Substances Control Act (TSCA) Inventory.  
 Repeated overexposure to dust may result in irreversable lung damage.  
 This product is non hazardous for characteristic toxicity when tested by the EPA TCLP Method.  
 Material is nonflammable and stable and does not contain organic additives.  
 This material contains low levels of naturally occurring radioactive material (NORM).  
 If caused to dust, personal protective equipment is required. Please consult with the ingredient limit levels.

**II. COMPOSITION, INFORMATION ON INGREDIENTS**

Chemical Ingredients	C.A.S. Number	% By Weight	ACGIH TLV TWA/STEL	OSHA PEL TWA/STEL	Other TWA/STEL	LD50	LC50
Rare Earth Oxide	68188-83-0	*	10mg/m <sup>3</sup> Total**	15mg/m <sup>3</sup> **			
<b>Notes</b>							
Rare Earth Fluoride	68188-85-2	*	2.5mg/m <sup>3</sup> as F	2.5mg/m <sup>3</sup> as F			
<b>Notes</b>							
ALUMINUM SILICATE	1332-58-7		2mg/m <sup>3</sup> Resp	10mg/m <sup>3</sup> Total***			
<b>Notes</b>							
<b>Other:</b>	*Combined Rare Earth Oxide and Rare Earth Fluoride levels are greater than 75%. Respirable Levels ACGIH ILV = ** 3mg/m <sup>3</sup> ; OSHA PEL =***5mg/m <sup>3</sup> .						

**III. HAZARDS IDENTIFICATION PRIMARY ROUTE OF ENTRY**

**Eyes:** Dusts may be abrasive and irritating to the eyes and cause stinging, watering, and redness. Avoid contact with eyes. Wash thoroughly after handling.

**Skin:** Not absorbed through skin. Dusts may be abrasive and mildly irritating to the skin. No harmful effects from skin absorption are expected.

**Ingestion:** (Swallowing): All accidental ingestion of dust or slurry may cause irritation of the digestive tract.

**Inhalation:** (Breathing): Breathing dust may result in irritation of the nose and throat, coughing, shortness of breath and bronchitis.

**Medical Conditions****Aggravated by Exposure:**

**IV. FIRST AID MEASURES**

<b>Eyes:</b>	Rinse opened eye for extended period of time under running water. Avoid rubbing. Seek medical attention.
<b>Skin:</b>	Immediately wash with water and soap and rinse thoroughly.
<b>Ingestion:</b>	Seek medical assistance. Drink large amount of water if patient is conscious.
<b>Inhalation:</b>	Remove to fresh air; if required, provide artificial respiration.
<b>Other:</b>	NOTE TO PHYSICIAN: Lanthanides can produce abnormalities on chest x-ray due to their high density. However, the lesions usually have little or no clinical significance.

**V. FIRE FIGHTING MEASURES**

<b>Flash Point:</b>	NOT APPLICABLE
<b>Test Method:</b>	NOT APPLICABLE
<b>Lower Flammability Limit:</b>	NOT APPLICABLE
<b>Upper Flammability Limit:</b>	NOT APPLICABLE
<b>Extinguishing Agents:</b>	NOT APPLICABLE
<b>Unusual Fire or Explosion</b>	None
<b>Hazards:</b>	
<b>Fire Fighting Procedures:</b>	Use fire fighting measures that suit the surrounding fire. Wear self-contained respirator.
<b>Other:</b>	Product is not flammable.

**VI. ACCIDENTAL RELEASE MEASURES**

<b>Containment/Cleanup:</b>	Spill Procedures: Wear proper protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Use dustless methods (e.g. vacuum) to collect spilled material and place it into closable container for disposal. Do not dry sweep. Flush spilled material into proper retaining areas or containers with water to avoid airborne particles.
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**VII. HANDLING AND STORAGE**

<b>Other:</b>	Keep container tightly sealed. Store in cool, dry place. Always wear proper protective equipment. Work in a well ventilated area. Avoid contact and breathing dust. Maintain and use NIOSH approved respirator.
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**VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>Skin:</b>	Gloves recommended.
<b>Respiratory:</b>	Use NIOSH approved respiratory protection. In order to limit exposure to NORM, product workers should wear appropriate NIOSH approved dust respirator when conditions are dusty. Refer to the latest standards of ANSI (Z88.2) OSHA 29CFR, and NIOSH respirator logic.
<b>Engineering:</b>	Handle with adequate ventilation for dust: see OSHA CFR 1910.94 Ventilation and CFR 1910.1000 (air contaminants) normal clean-up procedures. A source of clean water should be available to flush eyes/skin.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Light Red
<b>Boiling Point:</b>	NOT AVAILABLE
<b>Freezing Point:</b>	NOT AVAILABLE
<b>pH:</b>	6.5 – 7.5
<b>Solubility in Water:</b>	Insoluble
<b>Specific Gravity:</b>	4.5 – 6.5
<b>Vapor Pressure:</b>	NOT AVAILABLE
<b>Vapor Density:</b>	NOT AVAILABLE
<b>Physical State:</b>	Powder
<b>Volatile Content:</b>	NOT AVAILABLE

**X. STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Hazardous Decomposition</b>	Will not occur.
<b>Products:</b>	
<b>Incompatible Products:</b>	Not Found

**XI. TOXICOLOGICAL INFORMATION**

<b>Other:</b>	The ingredients in this product have not been identified as carcinogens by NTP, IARC, or OSHA.
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**XII. ECOLOGICAL INFORMATION**

<b>Ecotoxicity:</b>	
<b>Other:</b>	Not found. This product is not expected to present an environmental hazard.

**XIII. DISPOSAL CONSIDERATIONS**

<b>Disposal Method:</b>	Dispose in accordance with federal, state, and local regulations.
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**XIV. TRANSPORT INFORMATION**

<b>D.O.T. Shipping Name:</b>	Not a DOT Hazardous Material
<b>D.O.T. Hazard Class:</b>	NA
<b>Other:</b>	LAND TRANSPORT ADR/RID Class: NA IMDG Class: NA Air Transport ICAO/IATA Class: NA

**XV. REGULATORY INFORMATION**

<b>TSCA Status:</b>	All components of this product are listed in TSCA.
<b>EPA Sara Title III Chemical Listings:</b>	Section 302 Extremely: No Section 311/312: Yes – Hazard categories for SARA 311/312 reporting: CHRONIC HEALTH Section 313 Toxic: Cerium Oxide is not a toxic chemical.
	OSHA States: Material contains low levels of natural occurring radioactive material (NORM)

**Supplemental State Compliance Information:** present in the rare earth materials. Chronic Health Hazard under OSHA HazCon Standard 1901.1200.

**California:** Prop 65:  
This product contains the following substances known to the state of California to cause cancer and/or reproductive harm: Radionuclides (cancer)

#### **XVI. OTHER INFORMATION**

#### **WARRANTY INFORMATION**

THIS INFORMATION IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.