

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: 2/12/2007
Date Prepared: 2/12/2007
MSDS Number: C0301 ; C0305 ; C0310 ; C0453 ; CDS72 ;

I. CHEMICAL PRODUCT IDENTIFICATION

Product Name: Cerium Oxide Polishing Compound
HMIS Ratings:
 Health: Slight(1)
 Flammability: Minimal(0)
 Instability/Reactivity: Minimal(0)
 Personal Protective Equipment: X

NFPA Ratings:
 Health: Slight(1)
 Flammability: Minimal(0)
 Instability/Reactivity: Minimal(0)

Other: EMERGENCY OVERVIEW
 CAUTION: PRODUCT DUST MAY BE IRRITATING
 TO EYES, SKIN AND RESPIRATORY SYSTEM
 COLOR: RED-BROWN
 PHYSICAL STATE: POWDER
 ODOR: ODORLESS

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
KAOLIN	1332-58-7	30 - 40	2 mg/m ³ (RESPIRABLE FRACTION)	15 mg/m ³ TWA (TOTAL DUST); 5 g/m ³ TWA (RESPIRABLE)			
Notes							
RARE EARTH OXIDE*	*	50 - 60	10 mg/m ³ TOTAL; 3 mg/m ³ (RESPIRABLE)	15 mg/m ³ (TOTAL); 5 g/m ³ (RESPIRABLE)			
Notes							
* RARE EARTH OXIDE IS A MIXTURE OF CERIUM OXIDE (1306-38-3), LANTHANUM OXIDE (1312-81-8), PRASEODYMLUM OXIDE (12037-29-5), AND NEODYMIUM OXIDE (1313-97-9)							
RARE EARTH FLUORIDE	**	10 - 20	2.5 mg/m ³ as F	2.5 mg/m ³ as F			
Notes							
RARE EARTH FLUORIDE IS A MIXTURE OF CERIUM FLUORIDE (7758-88-5) AND LANTHANUM FLUORIDE (13709-38-1)							
Other:							
THIS MATERIAL CONTAINS VERY LOW LEVELS OF NATURALLY OCCURRING RADIOACTIVE MATERIAL (NORM).							

III. HAZARDS IDENTIFICATION PRIMARY ROUTE OF ENTRY

Eyes: MAY CAUSE SLIGHT IRRITATION.
Skin: PROLONGED SKIN CONTACT MAY CAUSE SKIN IRRITATION AND/OR DERMATITIS.
Ingestion: MAY IRRITATE DIGESTIVE TRACT.
Inhalation: DUST IRRITATING TO RESPIRATORY TRACT.

Medical Conditions**Aggravated by Exposure:****IV. FIRST AID MEASURES**

Eyes:	RINSE IMMEDIATELY WITH PLENTY OF WATER, ALSO UNDER THE EYELIDS. GET MEDICAL ATTENTION IF IRRITATION DEVELOPES.
Skin:	WASH OFF IMMEDIATELY WITH SOAP AND PLENTY OF WATER. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE RE-USE. IF SYMPTOMS PERSIST, CALL A PHYSICIAN.
Ingestion:	DRINK PLENTY OF WATER. DO NOT INDUCE VOMITING WITHOUT MEDICAL ADVICE. CONSULT A PHYSICIAN.
Inhalation:	MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF SYMPTOMS PERSIST, CALL A PHYSICIAN.
Other:	NOTE TO PHYSICIAN: TREAT SYMPTOMATICALLY. LANTHANIDES, BECAUSE OF THEIR HIGH 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.

V. FIRE FIGHTING MEASURES

Flash Point:	NON COMBUSTIBLE
Test Method:	N/A
Lower Flammability Limit:	N/A
Upper Flammability Limit:	N/A
Extinguishing Agents:	USE EXTINGUISHING MEASURES THAT ARE APPROPRIATE TO LOCAL CIRCUMSTANCES AND THE SURROUNDING ENVIRONMENT.
Unusual Fire or Explosion Hazards:	NONE KNOWN
Fire Fighting Procedures:	AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND, NIOSH (APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR.

VI. ACCIDENTAL RELEASE MEASURES

Containment/Cleanup:	CLEAN UP PROMPTLY BY SCOOP OR VACUUM. WEAR PERSONAL PROTECTIVE EQUIPMENT. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL
Other:	PERSONAL PRECAUTIONS: AVOID DUST FORMATION. EVACUATE AREA OF ALL UNNECESSARY PERSONNEL. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. USE PERSONAL PROTECTIVE EQUIPEMENT. ENVIRONMENTAL PRECAUTIONS: PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DO NOT FLUSH INTO SURFACE WATER OR SANITARY SEWER SYSTEMS.

VII. HANDLING AND STORAGE

Other: HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. AVOID DUST FORMATION. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH HANDS THOROUGHLY BEFORE EATING, DRINKING OR SMOKING.
STORAGE:
KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: SAFETY GOGGLES WITH SIDE-SHIELDS.

Skin: LIGHTWEIGHT PROTECTIVE CLOTHING.
HAND PROTECTION: IMPERVIOUS GLOVES.

Respiratory: USE NIOSH APPROVED RESPIRATOR WHEN VENTILATION IS INADEQUATE.

Engineering: PROVIDE APPROPRIATE EXHAUST VENTILATION AT MACHINERY AND AT PLACES WHERE DUST OR FUMES CAN BE GENERATED.

Other: HYGIENE MEASURES: WASH CONTAMINATED CLOTHING BEFORE RE-USE.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: RED-BROWN

Boiling Point: >2,300.0°C

pH: NO DATA AVAILABLE

Solubility in Water: INSOLUBLE

Specific Gravity: 5.4 (H₂O = 1)

Vapor Pressure: NO DATA AVAILABLE

Physical State: POWDER

Volatile Content: NO DATA AVAILABLE

Other: MELTING POINT/RANGE: >2300°C
EVAPORATION RATE: NO DATA AVAILABLE

X. STABILITY AND REACTIVITY

Stability: STABLE AT NORMAL CONDITIONS

Hazardous Polymerization: WILL NOT OCCUR

Hazardous Decomposition: NONE REASONABLY FORESEEABLE. NONE UNDER NORMAL USE.

Products:

Incompatible Products: STRONG ACIDS

Conditions To Avoid: NONE KNOWN

XI. TOXICOLOGICAL INFORMATION

Acute Toxicology Data: NO DATA IS AVAILABLE ON THE PRODUCT ITSELF

Other: CARCINOGENIC EFFECTS: NOT LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.
KAOLIN: ACGIH-CARCINOGENS: A4 - NOT CLASSIFIABLE AS A HUMAN CARCINOGEN
RARE EARTH OXIDE

NIOSH – LD50s AND LC50s: >5 g/kg ORAL LD50 RAT

XII. ECOLOGICAL INFORMATION

Environmental Fate and Distribution: NO DATA IS AVAILABLE ON THE PRODUCT ITSELF.
Ecotoxicity:

Persistence and Degradation: NO INFORMATION AVAILABLE.

XIII. DISPOSAL CONSIDERATIONS

Disposal Method: WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ENVIRONMENTAL CONTROL REGULATIONS. WHERE POSSIBLE RECYCLING IS PREFERRED TO DISPOSAL OR INCINERATION. THIS PRODUCT CONTAINS NATURALLY OCCURRING RADIOACTIVE MATERIALS (NORM). CONSULT AND COMPLY WITH CURRENT REGULATIONS.

XIV. TRANSPORT INFORMATION

D.O.T. Shipping Name: NOT REGULATED
Other: TDG (CANADA): NOT REGULATED

XV. REGULATORY INFORMATION

TSCA Status: NOT SUBJECT TO TSCA 12(B) EXPORT NOTIFICATION

EPA Sara Title III Chemical Listings: NOT SUBJECT TO THE PROVISIONS OF SARA 313 TITLE III

Supplemental State Compliance Information: THIS PRODUCT OR ITS INGREDIENTS HAVE BEEN EVALUATED FOR NEW JERSEY, PENNSYLVANIA AND CALIFORNIA PROP 65 SUPPLIER NOTIFICATION REQUIREMENTS. SUBSTANCES THAT ARE SUBJECT TO NOTIFICATION REQUIREMENTS, IF ANY, ARE LISTED BELOW.
 KAOLIN: PARTK – LISTED
 RARE EARTH OXIDE: CAL PROP 65 –RADIONUCLIDES
 RARE EARTH FLUORIDE: CAL PROP65 –RADIONUCLIDES

Other: CANADIAN WHMIS
 WHMIS HAZARD CLASS: D2B TOXIC MATERIALS
 COMPONENTS: RARE EARTH OXIDE – 1% WHMIS INGREDIENT DISCLOSURE
 INTERNATIONAL INVENTORIES:
 TSCA 8(B): LISTED OR EXEMPT
 CANADIAN DSL: LISTED OR EXEMPT
 EINECS: LISTED OR EXEMPT
 PHILLIPINES(PICCS): NOT LISTED
 JAPAN (ENCS): NOT LISTED
 KOREA (KECL): LISTED
 CHINA (IECS): LISTED
 AUSTRALIA (AICS): NOT LISTED

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.