

Armour Products

Material Safety Data Sheet

Emergency Phone Number (24 HRS)
US Chemtrec (800) 424-9300 or (703) 527-3887
Canada (613) 996-6666
MSDS Number CO301/97

CO301-CO305-CO310-CDS72-POLISHING CERIUM OXIDE

I. PRODUCT INFORMATION

Product: Cerium Oxide Polishing Compound

II. OSHA HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CAS NUMBER	% BY WEIGHT	CHEMICAL NAMES	ACGIH TLV	OSHA PEL
68188-83-0	20-75	RARE EARTH OXIDE	10mg/m Total*	15 mg/m Total**
1332-58-7	<50	Kaolin	2 mg/m respirable	15 mg/m Total**
7733-02-0	1.5	Zinc Sulfate	10 mg/m	10 mg/m
14485-31-5	<0.20	Thorium Phosphate	See Below***	See Below***

*3 mg/m Respirable **5 mg/m Respirable ***1x10⁻¹² Microcuries/ml-air for Th232 (NRC)

III. HAZARDS IDENTIFICATION

Emergency Overview: If caused to dust, this material has silica and inert or nuisance dust limits. Read above ingredient limit levels. Prolonged overexposure to dusts may cause irreversible lung damage. This product is under TCLP limits. This material contains low levels of naturally occurring radioactive material (Norm).

Potential Health Effects:

Eye Contact: Dust may irritate eyes. Contact with dust or slurry may be abrasive and irritating causing tearing and redness.

Inhalation: breathing dust may result in irritation of the nose and throat, coughing, shortness of breath and bronchitis. Existing respirable disorders may be aggravated by exposure.

Skin Contact: not absorbed through skin. Dust may be abrasive and mildly irritating. No adverse effects expected.

Ingestion: all accidental ingestion of dust or slurry may cause irritation of the digestive tract.

Chronic Effects/carcinogenicity: Prolonged inhalation/overexposure to dusts may cause irritation of the digestive tract.

Teratology (Birth Defect) Information: n/a

Reproduction Information: n/a

IV. FIRST AID MEASURES

Inhalation: remove victim to fresh air, apply artificial respiration as needed, obtain first aid or medical assistance

Eye Contact: Flush the eyes immediately with large amounts of running water, lifting the upper and lower lids occasionally. If irritation persists or for imbedded foreign body, get immediate medical attention. Avoid rubbing, may cause to scratch eye.

Skin Contact: No first aid should be needed since this product does not affect the skin. Wash exposed skin with soap and water before breaks and at the end of the shift. Obtain first aid or medical assistance if needed.

Ingestion: If large amounts are swallowed, get immediate medical attention. Drink large amounts of water if patient is conscious.

Note to Physician: Lanthandes, because of their high density can produce abnormalities on chest x-ray. Lanthandes generally are not felt to be and the lesions typically have little or no clinical significance. However, occasional cases of pneumoconiosis have been reported.

V. FIRE FIGHTING MEASURES

Flammable Properties:

Flash Point: will not burn, n/a Method Used: n/a

Flammable limits: LEL: n/a UEL: n/a

Extinguishing Media: This product will not burn but is compatible with all extinguishing media. Use any media that is appropriate for the surrounding fire.

Fire and Explosion Hazards: Not flammable. No Flash Point. No fire or explosion hazard.

Fire Fighting Instructions: Use sufficient local exhaust to reduce the dust.

Fire Fighting Equipment: Use self-contained breathing apparatus, NOISH approved, to avoid dust or fumes generated during fire fighting efforts.

VI. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective equipment. If uncontaminated, collect using dustless method (HEPA vacuum or wet method) and place in appropriate container for use. If contaminated: a) Use appropriate method for the nature of contamination. b) Consider possible toxic fire hazards associated with the contaminating substances. Collect for disposal.

VII. HANDLING AND STORAGE

Do not breath dust. Use normal precautions against bag breakage or spills of bulk material. Avoid creation of respirable dust. Use good housekeeping in storage and use areas to prevent accumulation of dust in work area. Use adequate ventilation and dust collection. Maintain and use proper, clean respiratory equipment (see section VIII). Warn your employees (and customers) by posting and training about OSHA precautions.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Handle with adequate ventilation for dust: See OSHA 29 CFR 1910.94 Ventilation and CFR 1910.1000 (A/R Contaminants) Normal clean-up procedures. A source of clean water should be available to flush eyes/skin.

Respiratory Protection: Use appropriate respiratory protection for respirable particulates based on consideration of airborne workplace concentrations and duration of exposure. Refer to the most recent standards of ANSI (Z88.2) OSHA (29CFR 1910.134), and NIOSH Respirator logic. In order to limit exposure to norm, production workers should wear appropriate NIOSH approved respirator when dusty.

Skin Protection: Protective gloves recommended.

Eye Protection: Safety goggles or glasses recommended.

Exposure Guidelines(s): See section II

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Buff color

Molecular Weight: n/a

Specific Gravity: 5.4

Boiling Point: NF

Odor: odorless

Vapor Density: NF

Evaporation Rate: NF

pH: 5.0-8.0

Vapor Pressure: NF

Freezing Point: NF

Physical State: Powder

Viscosity: n/a

Melting Point: NF

Solubility in Water: Insoluble

% Volatile: 0%

n/a: Not Applicable

NF: Not Found

X. STABILITY AND REACTIVITY

Chemical Stability: Stable

Incompatibility: None Found

Hazardous Decomposition Products: Will not occur

Hazardous Polymerization: Will not occur

XI. TOXICOLOGICAL INFORMATION

The ingredients in this product have not been identified as carcinogens by NTP, IARC, or OSHA. A Thorium compound, *not in this product*, has been identified as a human carcinogen by the US National Toxicology program based on reports of liver cancer in person given large intravenous injections for diagnostic purposes. The very small amount of highly insoluble Thorium Phosphate in this product is not thought to present a significant health hazard.

XII. ECOLOGICAL INFORMATION

No eco-toxicity data is available. This product is not expected to present an environmental hazard.

XIII. DISPOSAL CONSIDERATIONS

If uncontaminated, dispose as in inert, non-metallic mineral. If contaminated: dispose in accordance with all applicable local, state, and Federal regulations.

XIV. TRANSPORT INFORMATION (not meant to be all inclusive)

D.O.T. Shipping Name: Cerium Oxide Polishing Compound

D.O.T. Hazard Class: Not Regulated

U.N. / N.A. Number: n/a

Product RQ (lbs): n/a

D.O.T. LABEL: none needed

D.O.T. PLACARD: None needed

Product Label: HMIS 1,0,0,B = Chronic

XV. REGULATORY INFORMATION (not meant to be all inclusive)

OSHA Status: Material contains low levels of naturally occurring radioactive material (norm) present in the rare earth chronic health hazard under OSHA HAZCOM standard 1910.1200.

TSCA Status: listed in TSCA

CERCLA Reportable: yes RQ 1000

SARA Title III:

Section 302 Extremely: NO

Section 311/312: YES-Hazard categories for SARA 311/312 Reporting: Chronic Health

Section 313 Toxic: NO-This product contains the following chemicals subject to annual release reporting requirements: none

RCRA Status: NO

California Proposition 65:

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

XVI. WARRANTY INFORMATION

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEVED ACCURATE AND RELIABLE AS OF THE DATE HEREOF. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION. NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.