

## MATERIAL SAFETY DATA SHEET

1	<b>PRODUCT NAME REF (MSDS 22 )</b>	CERIUM OXIDE
	<b>Supplied by:</b>	Lapmaster International Ltd Lee Mill Industrial Estate Ivybridge Devon PL21 9EN Tel: + 44 1752 893191 Fax: + 44 1752 896355
2	<b>Composition:</b>	Cerium Oxide (CeO <sub>2</sub> CAS 1306-38-3)
3	<b>Hazards Identification:</b>	This material, in common with other Rare Earth oxides is of low acute toxicity and is not thought to present an Acute hazard. Users should note that the long-term inhalation of Rare Earth compounds (oxides) is reported as producing Pneumoconiosis.
4	<b>First Aid Measures:</b>  <b>Eyes:</b> <b>Skin:</b> <b>Inhalation:</b> <b>Ingestion:</b>	The powder will irritate the eyes because of its abrasive properties. Inhalation will cause coughing and sneezing and may have long term effects on the lungs. The compound is not readily absorbed from the gastrointestinal tract.  Irrigate with water or isotonic saline solution for 15 minutes. Wash skin with soap and water.  Remove from exposure and allow to rest in fresh air.  Rinse mouth with water and give water or milk to drink.
5	<b>Fire-fighting Measures:</b>	Not combustible. No special fire-fighting procedures are necessary. Use any extinguishing agent suitable for the surrounding fire.

6	<b>Accidental Release Measures:</b>	Collect in a suitable container for re-use, re-cycling or for disposal.
7	<b>Handling and Storage:</b>  Handling:  Storage:	Good industrial hygiene practices should be observed. Use only under conditions of good local ventilation. Avoid contact with skin and eyes. Do not eat, drink, smoke or apply cosmetics whilst using this material.  Locate in a closed container in a cool dry chemical store.
8	<b>Exposure Controls/Personal Protection:</b>	No Occupational Exposure Standards have been established for this material. Users are advised to Minimize exposure. If necessary appropriate filter type mask, chemically resistant gloves and suitable eye protection should be worn.
9	<b>Physical and Chemical Properties:</b>  Appearance Odour pH Boiling point Melting point Flash point Flammability Auto-flammability Explosive properties Oxidising properties Vapour pressure Relative density Solubility  Partition coefficient	Off white yellow powder No odour Not applicable No data 2600°C approx. Not applicable Not flammable Not applicable Not explosive Not oxidising No data 7.132 Water-insoluble Fat- no data No data
10	<b>Stability and Reactivity:</b>	This material is supplied in an air stable condition No specific reactive hazards are known.

11	<b>Toxicological Information:</b>	No specific toxicological data is available for this material. One report indicates Rare Earth oxides are Tolerated by female rats at 1000 mg/kg. In general The absorption of Rare Earth oxides following ingestion does not exceed 0.05%, however the oral intake of 2gm/kg is reported as causing mucosal injury. Reports of over exposure to fumes of Rare Earth metals, presumably as oxides, indicate inhalation may cause headaches and nausea. Chronic over-exposure is reported as producing pneumoconiosis
12	<b>Ecological Information:</b>	There is no data available for this material but it is not thought to present an environmental hazard. Some aquatic plants are reported as accumulating Rare Earth metals.
13	<b>Disposal Considerations:</b>	The final disposal of this material should be in accordance with all local and national regulations.
14	<b>Transport Information:</b>	Not restricted.
15	<b>Regulatory Information:</b> EC Supply:  Risk phrases:	None  None
16	<b>Other Information:</b>  Safety phrases	22 Do not breathe dust. 24/25 Avoid contact with skin and sys
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Date: September 2002		