

## MATERIAL SAFETY DATA SHEET

1	<b>PRODUCT NAME</b> <b>REF (MSDS 17)</b>	<b>CEROX 1670</b>
	<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>Information on Ingredients</b>  <b>&gt;&gt;Preparation:</b> <b>Chemical Nature:</b>	Preparation based on cerium oxide.
3	<b>Hazards Identification:</b>  <b>Adverse Human Health Effects:</b>  <b>Physical and Chemical Hazards:</b> <b>Fire or Explosion:</b>  <b>Classification/Specific Hazards:</b>	Slightly irritating to eyes and respiratory system.   No particular fire or explosion hazard.  According to EEC criteria, this product is not classified as a "hazardous preparation". According to I.A.E.A. criteria, this product is not classified as "radioactive".
4	<b>First Aid Measures:</b> <b>Eyes:</b>  <b>Skin:</b>  <b>Inhalation:</b>  <b>Ingestion:</b>  <b>Protection of First-Aiders:</b>	Rinse with plenty of water immediately.  Rinse with plenty of water.  Move the affected person from the contaminated area and into the fresh air.  Rinse out mouth with water. Consult a Doctor if necessary.  Respiratory protection with a particle filter.

5	<p><b>Fire-fighting Measures:</b></p> <p><b>Suitable extinguishing media:</b></p> <p><b>Unsuitable extinguishing media:</b></p> <p><b>Specific Hazards:</b></p> <p><b>Protection of Fire-Fighters:</b></p>	<p>All extinguishing agents can be used.</p> <p>None. If there is a fire close by, use suitable extinguishing agents.</p> <p>For further information, refer to Section 10 “Stability and Reactivity”.</p> <p>Respiratory protection with a particle filter.</p>
6	<p><b>Accidental Release Measures:</b></p> <p><b>Personal precautions:</b></p> <p><b>Environmental precautions:</b></p> <p><b>Methods for cleaning up:</b></p> <p>- <b>Recovery:</b></p> <p><b>Cleaning/Decontamination:</b></p> <p><b>Disposal:</b></p>	<p>Avoid contact with eyes.</p> <p>Personal protective equipment:</p> <ul style="list-style-type: none"> <li>- Respiratory protection device with a particle filter.</li> <li>- Safety glasses.</li> <li>- Appropriate gloves.</li> </ul> <p>In order to avoid the disposal of material in suspension, transfer into a settling tank.</p> <p>Collect up the product and place it in a spare container: suitably labelled.</p> <p>Wash the floor with plenty of water.</p> <p>Dispose of materials or solid residues at an authorised site.</p>

7	<p><b>Handling and Storage:</b></p> <p><b>Handling:</b></p> <p><b>Technical Measures:</b></p> <p><b>Measures:</b></p> <p><b>Safe Handling Advice:</b></p> <p><b>Storage:</b></p> <p><b>Technical Measures:</b></p> <p><b>Storage Conditions:</b></p> <ul style="list-style-type: none"> <li>- <b>Recommended:</b></li> </ul> <p><b>Incompatible Products:</b></p> <p><b>Packaging:</b></p> <p><b>Packing Materials:</b></p> <ul style="list-style-type: none"> <li>- <b>Recommended:</b></li> <li>- <b>Not suitable:</b></li> </ul>	<p>Dust extraction (suction).</p> <p>Use a wet method in preference to a dry one.</p> <p>Ensure that there is a suitable ventilation system.</p> <p>Does not require any specific or particular technical measures.</p> <p>Stable under normal storage conditions.</p> <p>Refer to the detailed list of incompatible materials. (section 10 “Stablility/Reactivity)</p> <p>Packaging with a closing device.</p> <p>Plastic materials.</p> <p>None, to our knowledge.</p>
8	<p><b>Exposure Controls/Personal Protection:</b></p> <p><b>Engineering Measures:</b></p> <p><b>Occupational Exposure limits:</b></p> <ul style="list-style-type: none"> <li>- <b>Limits (France):</b></li> <li>- <b>Limits(USA/ACGIH):</b></li> </ul> <p><b>Surveillance Procedures:</b></p> <p><b>Personal Protective Equipment:</b></p> <ul style="list-style-type: none"> <li>- <b>Respiratory Protection:</b></li> <li>- <b>Hand Protection:</b></li> <li>- <b>Eye Protection:</b></li> <li>- <b>Skin and Body Protection:</b></li> </ul> <p><b>Collective Emergency Equipment:</b></p> <p><b>Hygiene Measures:</b></p>	<p>Ensure good ventilation of the workstation.</p> <p>VME: 10 mg/m<sup>3</sup>. Alveolar dusts – VME: 5 mg/m<sup>3</sup>. TLV (TWA): 10 MG/M<sup>3</sup></p> <p>Monitor the atmosphere at regular intervals.</p> <p>Respiratory protective device with a particle filter. Protective gloves made of rubber. Safety spectacles. Protective clothing.</p> <p>Safety shower.</p> <p>Eye fountain.</p> <p>Always take a shower after work.</p>

9	<p><b>Physical and Chemical Properties:</b></p> <p><b>Physical State:</b>  <b>Form:</b>  <b>Average Particle Size:</b>  <b>Colour:</b>  <b>pH:</b></p> <p><b>Specific Temperatures:</b>  - <b>Melting:</b></p> <p><b>Flammability Characteristics:</b>  - <b>Flash Point:</b>  - <b>Oxidizing Properties:</b>  <b>Explosive Limits in Air:</b>  <b>Apparent Specific Gravity:</b>  <b>Solubility:</b>  - <b>In Water:</b>  - <b>In Organic Solvents:</b></p>	<p>Solid, Fine Powder  1-2um  Creamy white  Not applicable (insoluble product)</p> <p>Product does not melt.&gt;2000 °C</p> <p>Not applicable  Non oxidizing material according to EEC criteria  Not applicable.  1.3 – 1.7 kg/dm<sup>3</sup> (untamped product)</p> <p>Practically insoluble.  Insoluble in: common solvents.</p>
10	<p><b>Stability and Reactivity:</b></p> <p><b>Stability:</b></p> <p><b>Hazardous Reactions:</b>  <b>Conditions to avoid:</b></p> <p><b>Materials to avoid:</b></p>	<p>Stable at ambient temperature and under normal conditions of use.</p> <p>No dangerous reactions known under normal conditions of use.  May explode under specific conditions.</p> <p>No dangerous reaction known with common products.</p>
11	<p><b>Toxicological Information</b></p> <p><b>Acute Toxicity:</b></p> <p><b>Local Effects:</b></p>	<p>Dust (particles) :LC<sub>50</sub> inhalation (Rat) / 4h:&gt;5mg/l.  LD<sub>50</sub> skin (Rat) :&gt;2000mg/kg  LD<sub>50</sub> oral (Rat) :&gt;2000mg/kg  (Cerium Oxide)</p> <p>Powdery product. May cause slight irritation to the ocular mucous membranes due to the presence of a foreign body.</p>

12	<p><b>Ecological Information:</b></p> <p><b>Behaviour in the Environment:</b></p> <p><b>Mobility:</b></p> <p><b>Persistence/Degradability:</b></p> <p><b>Destination of Product:</b></p>	<p>Practically insoluble product, readily forms deposits.</p> <p>Persisting product.</p> <p>Ultimate destination of the product: Soil and Sediment.</p>
13	<p><b>Disposal Considerations:</b></p> <p><b>Waste from Residues:</b></p> <p><b>Destruction/Disposal:</b></p> <p><b>Contaminated Packaging:</b></p> <p><b>Decontamination/Cleaning:</b></p> <p><b>Destruction/Disposal:</b></p> <p><b>Note:</b></p>	<p>Dispose of materials or solid residues at a licensed site.</p> <p>Wash with water.</p> <p>Entrust the thoroughly decontaminated packaging to a licensed waste-contractor.</p> <p>The User's attention is drawn to the possible existence of local regulations regarding disposal.</p>
14	<p><b>Transport Information:</b></p> <p><b>International Regulations:</b></p> <p><b>Land:</b></p> <p>- Rail/Road (RID/ADR)</p> <p><b>Sea (IMO/IMDG):</b></p> <p><b>Air (ICAO-IATA):</b></p> <p><b>Note:</b></p>	<p>Not restricted.</p> <p>Not restricted</p> <p>Not restricted</p> <p>The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.</p>

15	<p><b>Regulatory Information:</b></p> <p><b>Labelling:</b> <b>EEC Regulations:</b></p> <p><b>Note:</b></p>	<p>Mandatory labelling (self-classification) of hazardous preparations: not applicable.</p> <p>The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the Safety Data Sheet. The User's attention is drawn to the possible existence of additional provisions, which complete these regulations. Refer to all applicable national, international and local regulations or provisions.</p>
16	<p><b>Other information</b></p> <p><b>Uses:</b> <b>- Recommended Uses:</b></p>	<p>Glass polishing.</p> <p>All the constituents of this preparation are registered in the EINECS inventory. All the components of this preparation are registered in the TSCA inventory.</p> <p>All the components of this preparation are registered in the MITI list (Japan). All the components of this preparation are registered in the AICS inventory. All the constituents of this preparation are registered in the Canadian inventory (CEPA DSL).</p>

**Disclaimer:** This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.