

### Description

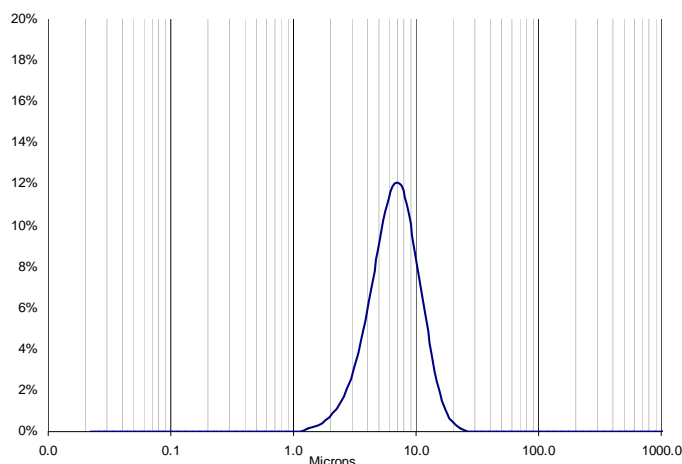
Ultra-Sol *Zero Ra* polishing powders consist of industry standard cerium oxides widely used in many different applications. These products feature less stringent particle size distributions, and may contain a slightly higher percentage of other rare earth oxides. Zero Ra cerium oxides are ideally suited in general polishing applications, either in concert with Eminess polishing pads or on pitch. Specific targets include materials such as glass, optical materials, electro-optical materials, laser crystals, and ophthalmic lenses.

In addition to the cerium oxide powders, Eminess also offers a complete line of ceria slurries, with a wide range of particle sizes, percent solids, pH, in various chemistries.

The information provided in this note should be used as a starting point for the customer's application.

### Physical Characteristics

SF-C1600	
Mean Particle Size ( $\mu$ )	6.0
Total Rare Earth Oxides (TREO)	99.95%
CeO <sub>2</sub> /TREO	99.0%
Final Cerium Content	98.95%



C1600 Particle Size Distribution

### Use

Ultra-Sol C1600 polishing powders are imported and treated in-house to improve suspension characteristics in deionized water. They are typically used in polishing applications to produce surface finishes approaching a few angstroms. It is recommended that Ultra-Sol C4100 not be mixed with other polishing compounds, as this may reduce the effectiveness of the suspension treatment.

In slurry form, mild agitation is all that is needed to keep the powder from settling in the liquid. The product should be mixed continuously 10-20 min/day, by recirculation or mechanical stirring. For advice on recommended concentrations or suggestions on how to best modify pH, contact your Eminess Applications Engineer.

Operators must take care when working with powder products to prevent inhalation. It is recommended that a NIOSH or OSHA dust mask or respirator be used at all times when handling polishing powders. For more detailed information, please refer to the Material Safety Data Sheet.

### **Storage**

Standard packaging is in 25 kg pails. Smaller containers for sample trials or larger packaging for volume purchases may also be available upon request. All containers are High Density Polyethylene (HDPE).

Ultra Sol polishing powders should be stored in a clean, dry, temperature controlled environment.

### **Disposal**

Dispose in accordance with all applicable regulations.

*If you have any questions or comments, please don't hesitate to call your EMINESS Technologies, Inc. Applications Engineer.*

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### **About Eminess**

For over twenty years Eminess has been providing quality, precision polishing consumables to a vast array of industries. In addition to polishing slurries, Eminess also manufactures a variety of complimentary products, including polishing pads, waxless fixturing, carrier films, and pad conditioners.



We have invested heavily in the tools and infrastructure necessary to provide superior support to our customers, and guarantee quality products through strict observance of ISO 9001 standards. Our knowledgeable support and customer service staff stands ready to assist with polishing projects of any size. For superior products, support, and results, think Eminess!