

### Description

Ultra-Sol 1000HP is a rare earth high-purity cerium oxide dispersion used for achieving sub-angstrom optical finishes on silica-based optical materials. Performance meets or exceeds industry specifications for sleek, scratch/dig, surface finish, and elimination of sub-surface work damage. This product utilizes the highest quality ceria abrasive available on the market, and provides consistent yield improvements in glass polishing processes. It is ideal in applications where impurities, such as thoria, cannot be tolerated. Finally, this product incorporates advanced suspension chemistry, simplifying the preparation, mixing, and distribution of the slurry.

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

### Physical Characteristics

SF-1000HP	
Mean Particle Size	0.8 $\mu$
pH	8.5
Solids Content (By Weight)	10%
Final Cerium Content	99.8%

### Handling

Ultra-Sol 1000HP is a safe, aqueous based slurries. However, to avoid skin or eye irritation, handlers should use personal protective equipment including; rubber gloves, protective clothing, and eye protection. Follow all MSDS and label precautions and use good industrial safety and hygiene practices when handling or using this product.

It is recommended that the Ultra-Sol 1000HP Series dispersions be used in pure form. However, they may be diluted to a desired concentration of ceria solids using only high-quality de-ionized water (>18 M ohm). Mild agitation will keep the diluted slurry suspended. The product should be mixed periodically (10 to 20 min/day) by re-circulation or mechanical stirring. If diluted slurry is allowed to sit long enough to settle out of suspension, re-use of the settled solids, without proper rework, may cause some minor scratching and should be avoided. Storage and re-use of diluted slurry is not recommended. Due to the unique formulation, it is further recommended that the user not adjust the pH. If a different pH is required, please contact your EMINESS Technologies, Inc. Applications Engineer, for assistance in attaining the desired results.

## Storage

Standard packaging includes five (5) gallon pails and fifty-five (55) gallon drums. One (1) gallon bottles and thirty (30) gallon drums are available upon request. All containers are High Density Polyethylene (HDPE). Maintain storage in a temperature-controlled environment, between 40 and 100°F, avoiding prolonged exposure at either extreme.

## 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!