

Description

Ultra-Sol 3005, 3010, 3030 Cerium Oxide Dispersions are used extensively in precision polishing of glass, quartz, fused silica, and other silica-based optical materials. These cerium oxide dispersions of high purity are available in a variety of mean particle diameters, yet in a suspension enhanced solution. In addition, Ultra-Sol 3005, 3010 and 3030 provide a range of chemical and mechanical combinations, which can be adapted to optimum performance on many materials.

Eminess Technologies manufactures ultra-high-purity, thoria-free, cerium oxides such as the Ultra-Sol 1000HP. These are excellent alternatives for applications requiring the highest levels of purity.

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

Physical Characteristics

	SF-3001	SF-3005	SF-3010	SF-3030
Mean Particle Size	0.3 μ	0.5 μ	1.2 μ	3.0 μ
pH	8.6	8.8	9.5	7.3
Solids Content (By Weight)	10%	9%	16%	15.5%
Final Cerium Content	99.5%	99.5%	99.5%	99.5%

Handling

Ultra-Sol 3005, 3010, and 3030 are 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 all Ultra-Sol “3000” 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.

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!