

### Description

Ultra-Sol 1040 is a high-purity cerium oxide dispersion used extensively in precision polishing of glass, quartz, fused silica, and other silica-based optical materials. **Ultra-Sol 1040** is similar to Ultra-Sol 1000 but is more concentrated for faster removal rates and is capable of higher dilution ratios.

The alkaline pH 9 slurry is formulated to provide chemically enhanced polishing.

- Ultra-Sol 1040 performs to meet and exceed industry specifications for sleek, scratch/dig, surface finish, and elimination of sub-surface work damage.
- Ultra-Sol 1040 is a high-purity permanent suspension that provides consistent yield improvements in glass polishing processes.
- Ultra-Sol 1040 is ideal in applications where precision glass polishing is required. The unique chemistry allows for uniform and permanent suspension of the abrasive, which provides consistent and repeatable superior surface finishes.

### Physical Characteristics

SF-1040	
Mean Particle Size	1.2 $\mu$
pH	9.2
Solids Content (By Weight)	40%

### Handling

Ultra-Sol 1040 is a safe, aqueous based slurry. 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 appropriate industrial safety and hygiene practices when handling or using this product.

It is recommended that Ultra-Sol 1040 be used in pure form. However, it may be diluted up to a 20:1 ratio 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 recirculation 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 are also 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!