

Lapping and polishing slurries



Cerium oxide slurry

**ULTRA-SOL® 1000HP**



Precision cerium oxide featuring high purity and tight particle size distribution.

**Ultra-high purity cerium oxide slurry for precision optical polishing**

ULTRA-SOL® 1000HP is an extremely high purity, stable, precision cerium oxide polishing slurry used extensively for achieving sub-angstrom optical finishes on silica-based optical materials. Polishing performance meets or exceeds industry specifications for sleek, scratch / dig, and surface finish. The controlled particle distribution helps to eliminate sub-surface work damage caused by errant large particles.

With a purity of 99.9 %, ULTRA-SOL® 1000HP utilizes the highest quality ceria abrasive available on the market. It is ideal in demanding applications where impurities, such as thoria, cannot be tolerated. ULTRA-SOL® 1000HP incorporates advanced particle suspension chemistry, simplifying the preparation, mixing, and distribution of the slurry in production.



Pureon ready-to-use slurries are available in customer-tailored formulations in a wide range of viscosities.

**Product specifications**

Base material .....Cerium oxide  
 Shelf life.....12 months  
 Applications .....Fused silica, glass, zerodur

Order code	Base material	Particle size [µm]	pH	Solids content [%]	Specific gravity
NANOARC® CE-6450	Cerium oxide	0.03	8.0	18.0	–
ULTRA-SOL® 1000	Cerium oxide	1.15	9.7	15.0	1.14
<b>ULTRA-SOL® 1000HP</b>	<b>Cerium oxide</b>	<b>0.95</b>	<b>8.5</b>	<b>10.0</b>	<b>1.05</b>
ULTRA-SOL® CE-6750	Cerium oxide	0.95	8.0	20.0	–
ULTRA-SOL® CE-6752	Cerium oxide	0.95	8.0	20.0	–
ULTRA-SOL® CE-6755	Cerium oxide	0.95	8.0	50.0	–
ULTRA-SOL® OPTIQ	Cerium oxide	0.45	8.2	45.0	1.64

**Contact**

sales@pureon.com  
www.pureon.com/sales-contacts

**Order information**

**Packing**

1 gal jugs, 5 gal pail, and 55 gal drums. Other sizes available upon request.

**Unit of measure**

Gallon [gal]

**ULTRA-SOL® 1000HP highlights**

- Excellent suspension chemistry ensures homogeneous slurry and consistent particle delivery to the system
- Superior quality, control, and consistency
- Customized products available on request
- Short lead-times

**Instructions**

**Safety**

To avoid skin or eye irritation, use appropriate personal protective equipment according to MSDS. Follow all MSDS, Safety datasheet, label precautions and industrial safety and hygiene practices when handling or using this product.

**Homogenization**

For consistent performance, ensure that the suspension is completely homogenized prior to use. Suspensions can separate if stored over extended periods of time and if exposed to variable temperatures.

**Dilution**

This slurry is designed as a ready-to-use product directly from the container. If the slurry is to be used in a diluted form, use only high-quality deionized water (> 18 M ohm) for the dilution. The product should be mixed periodically (10 to 20 minutes per day) by recirculation or mechanical stirring to ensure that the particles are uniformly suspended. To avoid possible scratching issues, storage and re-use of on-site diluted slurry is not recommended without proper mixing and filtration.

Due to the unique formulation of this slurry, pH adjustment is not recommended. For a different pH, please contact your Pureon representative.

**Storage**

Recommended	4 °C – 33 °C / 40 °F and 90 °F
Sort term	0 °C – 38 °C / 32 °F and 100 °F

Products should be allowed to return to room temperature prior to use. Storage outside the recommended conditions may result in irreversible product damage.

**Disposal**

Dispose of in accordance with all applicable local regulations.



Pureon offers a wide range of customized solutions. More information can be found on [www.pureon.com/products/overview](http://www.pureon.com/products/overview)