



## Lapping and polishing slurries

Cerium oxide slurry

# ULTRA-SOL® OPTIQ



ULTRA-SOL® OPTIQ final polishing slurry achieves surface finishes under 5 Å on many different optical materials.

### High purity cerium oxide slurry for optical polishing

ULTRA-SOL® OPTIQ is a high-purity cerium oxide slurry designed for the precision polishing of borosilicate glass, fused silica, glass ceramics, and other optical materials. The slurry features a small, tightly distributed cerium oxide particle in a unique suspension that minimizes settling and facilitates cleaning. In addition, the slurry is highly concentrated to provide maximum flexibility through on-site dilution. It has quickly proven itself to be a superior cerium oxide polish to many existing products on the market.

ULTRA-SOL® OPTIQ's process performance exceeds industry specifications for sleek, scratch / dig, surface finish, and elimination of sub-surface damage on precision glass work pieces. The unique chemistry allows for uniform and permanent suspension of the abrasive, which provides consistent and repeatable superior surface finishes, and ease of use in production environments.



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
ULTRA-SOL® 1000	Cerium oxide	1.15	9.7	15.0	1.14
ULTRA-SOL® 1000HP	Cerium oxide	0.95	8.5	10.0	1.05
ULTRA-SOL® CE-6750	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.

Other sizes available upon request.

**Unit of measure**

Gallon [gal]

**Highlights**

- Small particle size and tight distribution result in excellent surface quality, removal rate, and repeatability
- Suspension package facilitates uniform delivery of abrasive to polishing workpiece and prevents settling in the tools and lines
- Designed to be easy to clean off parts and tools, resulting in less rework and higher yields
- Compatible with polishing pads, pitch, CNC tools, and spindle polishers



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)

**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.