

**Lapping and polishing slurries**



Cerium oxide slurry

**Ultra-Sol® Optiq**



Ultra-Sol Optiq final polishing slurry, designed to achieve surface finishes under 10A 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 and formulations.

**Product specifications**

Base material .....Cerium Oxide  
 Shelf life .....12 month  
 Typical applications .....Fused Silica, Glass, Zerodur

Variations of 200A formula	Base material	Particle size (µm)	pH value	Solids content (%)	Specific gravity
Ultra-Sol Optiq	Cerium oxide	0.40	8.2	45.0	1.64
Ultra-Sol CE-6750	Cerium oxide	0.75	8.0	20.0	-
Ultra-Sol CE-6755	Cerium oxide	0.75	8.0	50.0	-
Ultra-Sol 100HP	Cerium oxide	0.95	8.5	10.0	-
Ultra-Sol CE-6450	Cerium oxide	0.03	8.0	18.0	-

**Order information**

**Packing unit**

1 gal jugs.  
Other sizes available upon request.

**Quantity unit**

Gallon (gal)

**Contact**

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

**Ultra-Sol® Optiq 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 customize tailored solutions. More information can be found on [www.pureon.com/products/overview](http://www.pureon.com/products/overview)

**Instructions**

**Handling**

This material is a safe, aqueous based slurry. To avoid skin or eye irritation, however, handlers should use appropriate personal protective equipment including: rubber gloves, protective clothing, and eye protection. Follow all MSDS, Safety Data Sheet, and label precautions when handling this slurry. Also follow all appropriate industrial safety and hygiene practices when handling or using this product.

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, Pureon recommends using 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, it is recommended that the user not adjust the pH. If a different pH is required, please contact your Pureon Applications Engineer for assistance with your specific process need.

**Storage**

It is recommended that products be stored up to the expiration date at temperatures between 4°C and 33°C (40°F and 90°F). Products can be stored if kept above freezing (0°C or 32°F), and kept below 38°C (100°F) if prolonged exposure at temperatures at either extreme are avoided. Storage outside of the recommended conditions may result in irreversible product damage. In the event of exposure outside of the recommended conditions, please contact your Pureon representative for recommendations. In all cases the products should be allowed to return to room temperature prior to use.

**Disposal**

Dispose of in accordance with all applicable local regulations.