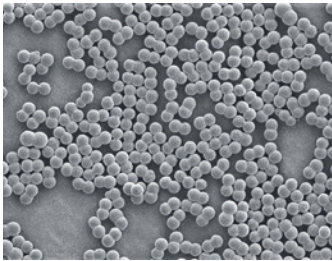


Lapping and polishing slurries



Colloidal silica slurry

**ULTRA-SOL® S33V2**



Original, sodium-stabilized colloidal silica for sapphire final polish.

**High speed slurry for a-plane and optical sapphire**

ULTRA-SOL® S33V2 is a colloidal silica polishing compound that provides industry leading removal rates and high quality finishes on hard substrates such as sapphire and silicon carbide. This is due to the physical properties of the base particles, such as low friability, high density, and high surface area. With the explosive growth of the sapphire industry, S33V2 represents the next-gen technology when facing difficult sapphire materials.

The ULTRA-SOL® S33V2 was designed from the ground-up to be a fast, dilutable colloidal silica slurry on a-plane sapphire. High rates translate into higher throughput and a lower overall cost per wafer. In addition, removal rates remain consistent over many hours of polishing, allowing operators to design tightly controlled polishing procedures.

**Product specifications**

Base material .....Colloidal silica  
 Shelf life.....12 months  
 Applications .....Ceramic, gallium arsenide, germanium, indium phosphide, silicon carbide



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

Order code	Base material	Particle size [µm]	pH	Solids content [%]	Specific gravity
ULTRA-SOL® S17	Colloidal silica	0.07	9.3	35.3	1.24
ULTRA-SOL® S27	Colloidal silica	0.07	9.3	50.0	1.24
ULTRA-SOL® S33V2	Colloidal silica	0.08	9.0	45.0	-
ULTRA-SOL® S33V2ND	Colloidal silica	0.08	9.0	45.0	-
ULTRA-SOL® S88	Colloidal silica	0.08	10.2	46.0	1.32

**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® S33V2 highlights**

- Novel blend of colloidal silica particles designed achieve fast polishing rates on a-plan sapphire
- Tightly controlled particle size distribution results in excellent lot-to-lot consistency
- Compatible with sapphire wafers for LED, optical sapphire windows, and watch crystals
- Compatible with pads, pitch, spindles, or CNC tools



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.