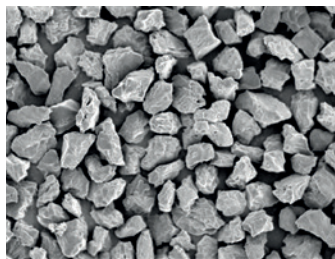


Lapping and polishing slurries



Diamond suspension

**ULTRA-SOL® STD1µ55P**



ULTRA-SOL® diamond colloidal blends are excellent intermediate polishes on hard substrates such as SiC.



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

**Ultra-Sol polycrystalline diamond suspensions**

ULTRA-SOL® diamond slurries are unique, neutral pH, water-based suspensions of premium diamond particles. They offer the tightest control of overall particle size distribution, with tight control of large particles. The slurries use Pureon’s proprietary suspension chemistry, creating an agglomerate free, homogeneous suspension regardless of particle size. They also feature a viscosity that is capable of being pumped or sprayed, and the slurries may also be used in applications where a fine surface quality is desired in a final polish application.

ULTRA-SOL® diamond suspensions have been successfully used to obtain superior finishes in a wide variety of applications including: crystals and substrates such as sapphire, silicon carbide, boron carbide tool and mold polishing, metallographic specimen preparation, ceramics and composites polishing, magnetic head assembly fabrication, and lapping of overcoat alumina.

**Product specifications**

Base material .....Diamond  
 Shelf life.....12 months  
 Applications .....Ceramic, sapphire, silicon carbide

| Order code              | Base material | Particle size [µm] | pH  | Concentration [cts/gal] | Specific gravity |
|-------------------------|---------------|--------------------|-----|-------------------------|------------------|
| ULTRA-SOL® STD0.1µ50M   | Diamond       | 0.1                | 8.5 | 50                      | 1.03             |
| ULTRA-SOL® STD0.5µ20MC  | Diamond       | 0.5                | 8.5 | 20                      | 1.03             |
| ULTRA-SOL® STD0.5µ20MCH | Diamond       | 0.5                | 8.5 | 20                      | 1.03             |
| ULTRA-SOL® STD0.5µ50M   | Diamond       | 0.5                | 8.5 | 50                      | 1.03             |
| ULTRA-SOL® STD1µ55P     | Diamond       | 1.0                | 8.5 | 55                      | 1.03             |
| ULTRA-SOL® STD3µ100M    | Diamond       | 3.0                | 8.5 | 100                     | 1.14             |
| ULTRA-SOL® STD6µ115P    | Diamond       | 6.0                | 8.5 | 115                     | 1.03             |
| ULTRA-SOL® STD9µ50MC    | Diamond       | 9.0                | 8.5 | 50                      | 1.03             |
| ULTRA-SOL® STD9µ130M    | Diamond       | 9.0                | 8.5 | 130                     | 1.03             |

**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®  
STD1µ55P highlights**

- Premium polycrystalline abrasive features superior rate and finish
- Long life-time due to the exposure of new cutting surfaces as diamonds break down
- Tight diamond particle size distribution and extreme lot-to-lot control
- Industry-leading suspension chemistry will remain stable for six months with no agitation

**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)