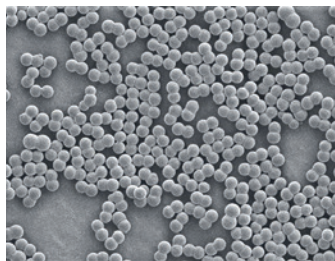


Lapping and polishing slurries



Colloidal silica slurry

ULTRA-SOL® 556



Pureon colloidal silica particles feature tight particle size distributions and industry leading lot-to-lot consistency.

Standard colloidal silica slurry for silicon final polish

ULTRA-SOL® 556 colloidal silica is a unique colloidal silica formulation that allows the user to obtain higher removal rates than with standard sodium-hydroxide stabilized colloidal silicas. It can be used in final polish operations with adjustments to polishing parameters dependent upon the specific material and process utilized.

Product specifications

Base materialColloidal silica
 Shelf life.....12 months
 ApplicationsCeramic, gallium arsenide, germanium, indium phosphide, lithium niobate, lithium tantalate, silicon, zerodur



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® 2EX	Colloidal silica	0.07	11.0	30.5	1.20
ULTRA-SOL® 3EX	Colloidal silica	0.07	7.3	30.0	1.20
ULTRA-SOL® 4A	Colloidal silica	0.03	9.5	30.0	1.20
ULTRA-SOL® 556	Colloidal silica	0.06	8.5	50.0	1.39
ULTRA-SOL® 558	Colloidal silica	0.09	11.9	28.0	1.19
ULTRA-SOL® 7A	Colloidal silica	0.06	10.0	30.0	1.20
ULTRA-SOL® 7H-PH4	Colloidal silica	0.07	4.0	30.0	1.20
ULTRA-SOL® NX88	Colloidal silica	0.13	10.5	16.3	1.10
ULTRA-SOL® NX88H	Colloidal silica	0.13	10.5	26.0	1.18
ULTRA-SOL® S27	Colloidal silica	0.07	9.3	50.0	1.24

Contact

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

Order information

Packing

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

Unit of measure

Gallon [gal]

ULTRA-SOL® 556 highlights

- Highly concentrated final polish for silicon wafers and silicon optical components
- Broad particle distribution promotes balance of both removal rate and surface finish
- Compatible with pads or pitch, on CPs, spindles, batch-process, single-wafer, and CNC tools
- Ideal for creating epi-ready surfaces when paired with POLITEX or OPTIVISION pads



Pureon offers a wide range of customized solutions. More information can be found on 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 Mohm) 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.