Ultra-Sol

S17 Colloidal Silica Slurry

Mohs 9

Description

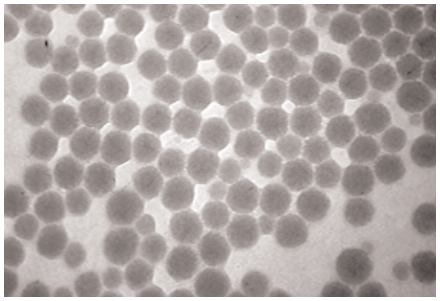
The Ultra-Sol S17 is a colloidal silica polishing compound that provides excellent removal rates and high quality finishes on hard substrates such as sapphire and silicon carbide. This is due to the physical properties of the base particle, such as low friability, high density, and high surface area. With the explosive growth of the sapphire industry, S17 has quickly proven to be the particle of choice when facing harder materials.

Eminess highly recommends the use of a hard, urethane pad with this product to maximize removal rate and throughput. Either the MH or IC1000 pads are excellent, with numerous grooving options available.

The information provided in this note should be used as a starting point for the customer's application.

Physical Characteristics

SF-S17	
Mean Particle Size	70nm
pH	9.5
Solids Content (By Weight)	35%



Tightly controlled silica particles

Handling

Ultra-Sol S17 colloidal silica is a safe, aqueous based slurry. However, to avoid skin or eye irritation, handlers should use personal protective equipment including; rubber gloves, protective clothing, and eye protection. Follow all MSDS and label precautions and use appropriate industrial safety and hygiene practices when handling or using this product.

It is recommended that Ultra-Sol S17 colloidal silica be used in pure form. However, it may be diluted using only high-quality de-ionized water (>18 M ohm). Mild agitation will keep the diluted slurry suspended. The product should be mixed periodically (10 to 20 min/day) by re-circulation or mechanical stirring. If diluted slurry is allowed to sit long enough to settle out of suspension, re-use of the settled solids, without proper rework, may cause some minor scratching and should be avoided. Storage and re-use of diluted slurry is not recommended.

Due to the unique formulation, it is further recommended that the user not adjust the pH. If a different pH is required, please contact your EMINESS Technologies, Inc. Applications Engineer, for assistance in attaining the desired results. Eminess Technologies offers colloidal silicas in both neutral and alkaline alternatives, with several different alkaline chemistry options available.

EMINESS TECHNOLOGIES, INC.

Storage

Storage tanks and distribution piping should be constructed of engineered plastic of polyethylene, polypropylene or fluoropolymer. Materials such as aluminum, copper, brass and PVC should be avoided.

Standard packaging includes five (5) gallon pails and fifty-five (55) gallon drums. One (1) gallon bottles are also available upon request. All containers are High Density Polyethylene (HDPE). Maintain storage in a temperature-controlled environment, between 40 and 100°F, avoiding prolonged exposure at either extreme.

Disposal

Dispose in accordance with all applicable regulations.

If you have any questions or comments, please don't hesitate to call your EMINESS Technologies, Inc. Applications Engineer.

About Eminess

For over twenty years Eminess has been providing quality, precision polishing consumables to a vast array of industries. In addition to polishing slurries, Eminess also manufactures a variety of complimentary products, including polishing pads, waxless fixturing, carrier films, and pad conditioners.

We have invested heavily in the tools and infrastructure necessary to provide superior support to our customers, and guarantee quality products through strict observance of ISO 9001 standards. Our knowledgeable support and customer service staff stands ready to assist with polishing projects of any size. For superior products, support, and results, think Eminess!