



Highlights

- Tightly distributed and controlled diamond alumina abrasives
- Industry-leading suspension chemistry will remain stable for six months with no agitation
- Dilutable to tune process to desired friction level and removal rate controlled diamond abrasives

Poly and mono diamond slurries

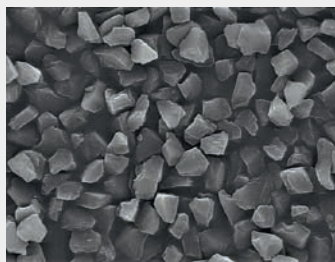
ULTRA-SOL® AlumaGem

A novel blend of alumina and diamond abrasives which has proven itself to be an excellent polishing agent for precision optics materials such as calcium fluoride, zinc sulfide, and zinc selenide among many others. This combination yields excellent scratch-dig free surfaces material removal rates by selecting the appropriate sized diamond product. Pureon has extensive experience manufacturing multi-particle blends that exhibit synergistic properties, and AlumaGem continues that legacy into the optics market.

AlumaGem Polishing Slurry is comprised of individual crystallites of nanometer sized phase alumina in precise proportion with discreetly sized fine diamond powder. A pH of 8.5 is maintained for maximum performance.

The presence of the alumina material also permits effective recirculation of AlumaGem.

Order code	Base material	Particle size [µm]	pH	Concentration [% solids by weight]
ALUMAGEM-0.1µP	Alumina / Diamond	0,1	8,5	10-12 %
ALUMAGEM-0.25µP	Alumina / Diamond	0,3	8,5	10-12 %
ALUMAGEM-0.5µP	Alumina / Diamond	0,5	8,5	10-12 %
ALUMAGEM-1µP	Alumina / Diamond	1,0	8,5	10-12 %
ALUMAGEM-3µP	Alumina / Diamond	3,0	8,5	10-12 %
ALUMAGEM-6µP	Alumina / Diamond	6,0	8,5	10-12 %



ULTRA-SOL® diamond–alumina blends are excellent polishes for hard substrates such as SiC, as well as IR and optical materials.



Pureon offers a wide range of customized solutions. Get in touch with us.

Product specifications

Base material	Aluminum Oxide, Diamond
Shelf life	12 months
Applications	Calcium Fluoride, Zinc Sulfide, Zinc Selenide

Order information

Packing	1 gal jugs Other sizes available upon request.
Unit of measure	Gallon [gal]

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 ($> 18 \text{ M ohm}$) 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 $4^{\circ}\text{C} - 38^{\circ}\text{C} / 39^{\circ}\text{F}$ 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. In the event of exposure outside of the specified conditions, please contact your local Pureon representative for recommendations.
Disposal	Dispose of in accordance with all applicable local regulations.

Contact

sales@pureon.com
www.pureon.com

