

Description

Ultra-Sol “M” Alumina Suspensions are unique permanent suspensions of our industry standard Ultra-Lox aluminum oxide abrasive powders. The unique alkaline chemistry combined with the high-purity (>99.99%) alumina powders provide an optimum solution for critical needs in precision polishing of optical materials, electro-optical materials, laser crystals, ophthalmic lenses, and in metallurgical specimen preparation.

Ultra-Sol M5-, M15-, M30-, and M100-PS Agglomerate-Free Alumina Suspensions are manufactured from our Ultra-Lox M series of agglomerate-free aluminum oxide powders. They are typically used in critical polishing applications to produce surface finishes approaching a few angstroms.

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

Physical Characteristics

	M5-PS	M15-PS	M30-PS	M100-PS
Mean Particle Size	1.0 μ	0.3 μ	0.1 μ	0.05 μ
pH	8.5	8.0	8.5	8.5
Solids Content (By Weight)	15%	15%	14%	10.5%

Handling

Ultra-Sol Alumina Suspensions are safe, aqueous based slurries. 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 Alumina Suspension be used in pure form. However, if diluted, use only high-quality de-ionized water (>18 M ohm). Mild agitation is all that is needed to keep the diluted slurry suspended. The product should be mixed periodically 10-20 min/day, by recirculation or mechanical stirring. Storage and re-use of diluted slurry is not recommended. 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. Due to the product unique formulation, it is further recommended that the user should not attempt adjustment of the pH. If a different pH is required, please contact your EMINESS Technologies, Inc. Applications Engineer, for assistance in attaining the desired results.

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!