



# Ultra-Lox R and M Alumina Powders

## APPLICATION NOTES

### INTRODUCTION

**Ultra-Lox R and M Alumina Powders** are industry standard, high-purity (>99.99%) alumina oxide abrasive powders. They provide an optimum solution for critical needs in precision polishing applications as well as high purity ceramic manufacturing.

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

### USE

#### **Ultra-Lox R Standard Alumina Powders**

This series of powders is ideal for less stringent polishing applications where a totally scratch-free surface is not necessary. They have the unique ability to break down during the polishing process to produce nicely polished surfaces, but with a coarser surface roughness than that which can be obtained with the Ultra-Lox M powder series.

#### **Ultra-Lox M Agglomerate-Free Alumina Powders**

A de-agglomerated form of our Ultra-Lox R series of aluminum oxide powders, **Ultra-Lox M Alumina Powders** are used in critical polishing applications to produce surface finishes approaching a few angstroms.

Both the "R" and "M" Series of **Ultra-Lox Alumina Powders** are available packaged in 1 LB jars or 5 LB bags, in the industry standard particle sizes as shown in the chart below:

Agglomerate-Free	Functional Particle Size	Standard
M5	1.0 $\mu\text{m}$	R5
M15	0.3 $\mu\text{m}$	R15
M30	0.1 $\mu\text{m}$	R25
M100	0.05 $\mu\text{m}$	R100

**Ultra-Lox Alumina Powders** can be dispersed easily into compatible liquid media through standard mechanical means. For precision applications, use only highest-purity (>18 Mohm) deionized water. Constant agitation of the dispersed powder is required to ensure homogeneity.

Aluminum Oxide powder is classified as a nuisance dust in small particle form. Use a NIOSH approved dust mask or appropriate respirator when handling powder during operations that can create dust. Please refer to the Material Safety Data Sheet for more information.

**Ultra-Lox Alumina Powders** are available in a pre-dispersed, permanently suspended form in a safe, aqueous base from Eminess Technologies. Contact Eminess Customer Service or Technical Support for information on Ultra-Sol "R" and "M" Alumina Suspensions.

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