



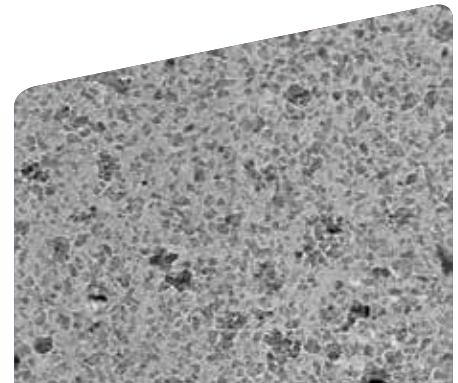
ENGINEERED PARTICLES / TRANSITION ALUMINA

# NanoSoft Alumina Slurry

Saint-Gobain's NanoSoft Alumina Slurry is an aqueous slurry of transitional phase alumina particles. The soft round alumina particles are a mixture of delta ( $\delta$ ) and theta ( $\Theta$ ) phases manufactured in a tightly controlled environment to ensure product consistency from batch to batch. Our soft alumina slurry has shown that when used in select chemistry packages, it can provide good rates and selectivity for alumina dielectric, Cu and Co Alloys, and NiFe CMP applications with superior defectivity performance.

The hardness of this particle is slightly lower than an alpha alumina particle, which may be a desirable property when it comes to minimizing defectivity or scratches. Although 9297 is currently manufactured to 50 nm, Saint-Gobain has the capability to customize morphology, size and hardness as needed.

9297 Nano Soft alumina particles come in a completely dispersed and stabilized aqueous dispersion. Our finest soft alumina particles are transparent and have lower turbidity compared to some colloidal silica slurries.



## APPLICATIONS

- Electronics
- Semiconductor CMP
- Optical/Ceramic Polishing
- Fillers for Clear Coating and Paints

## TYPICAL SIZE DISTRIBUTION

Size*	D <sub>50</sub>	D <sub>0.1</sub>	D <sub>90</sub>
50 nm	55 nm	N/A	N/A

\*Approximate figures

## TYPICAL SLURRY CHARACTERISTICS

9297	
pH	~4
% Solids	20%
Alumina Content	99+%
Appearance and Color	Transparent/Opaque
Suspension Properties	Fully Dispersed

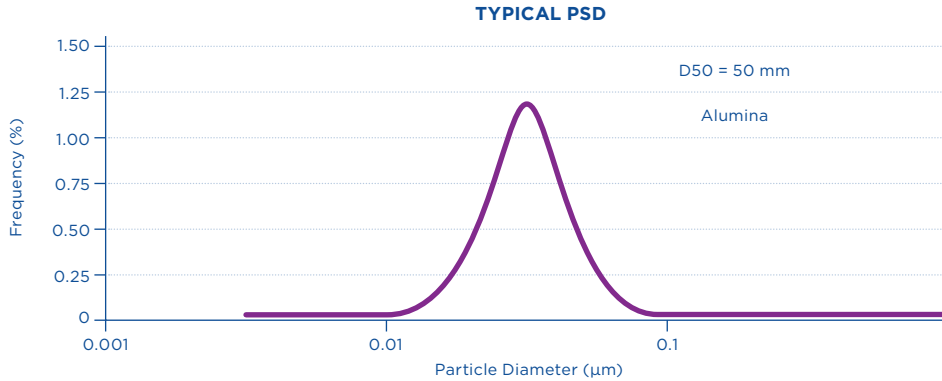
## BENEFITS

- High-purity Transitional phase soft alumina particles
- Fully dispersed and stable aqueous slurry
- Transparent/almost colorless
- Lower turbidity compared to some colloidal silica slurries
- Provides high material removal rate and controlled surface finish
- Can be re-circulated to maximize life
- Tightly controlled particle size distribution
- ISO 9001: 2015 certified
- State-of-the-art quality control to assure consistent performance
- Ability to customize products for specialized applications
- Knowledgeable application engineers available for technical support
- Can be diluted with D.I. water to extend the life of the slurry



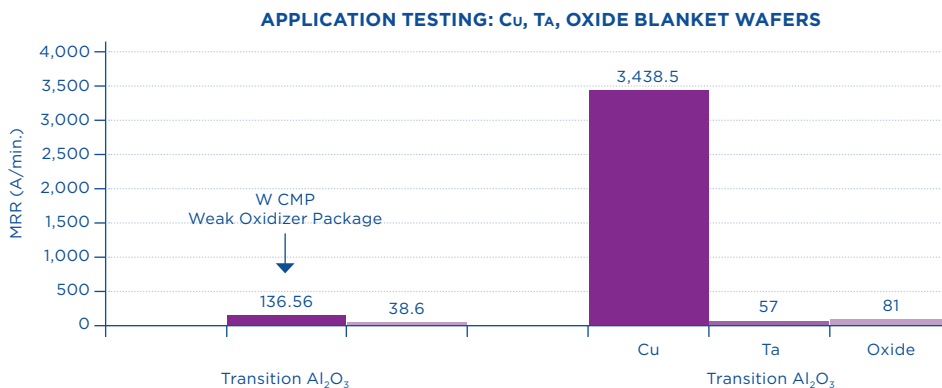
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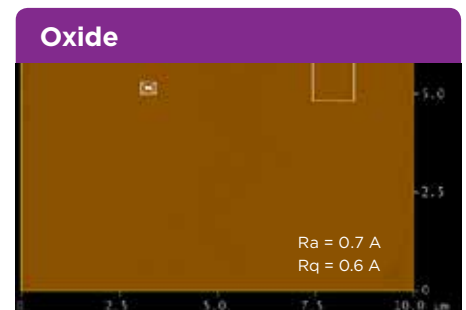
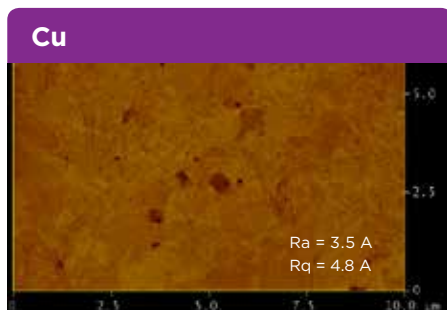


## AVAILABILITY

- Specifically designed for polishing and CMP applications
- Available size is 50 nm
- Other sizes may be available upon request
- Packaging in 5 gallon and 50 gallon plastic containers and larger IBC tote packaging



## AFM RESULTS OF Cu, Ta, OXIDE WAFERS



### Saint-Gobain Surface Conditioning

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Tel: 508-795-5000



ISO  
CERTIFIED  
9001: 2015 and  
14001: 2015

[surfaceconditioning.saint-gobain.com](http://surfaceconditioning.saint-gobain.com)

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**SURFACE CONDITIONING**

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