



## TENSOR-AP SERIES

### ALUMINA, CERIA AND ZIRCONIA SLURRIES FOR CMP PLANARIZATION

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TENSOR-AP Series Products are abrasive slurries made of tightly sized, high purity, sub-micron metal-oxide particles. The slurries are dispersed in a special polymer matrix with wetting agents and flow control additives. Each product is to be mixed with deionized water from between 10% to 60%, dependent on the specific application and the polishing pad.

TENSOR-AP Series Products are to be used with common oxidizers or, for the most difficult applications, with Intersurface Dynamics' APX Series of Slurry Modifying Additives. There are 4 different slurries from which to choose. AP/4 and AP/6 are alumina slurries that differ in particle size and particle distribution. TENSOR AP/7 is a high-purity ceria slurry and TENSOR AP/8 is a high-purity zirconia slurry. Each slurry is suitable for different metals and design layouts.

The slurries are diluted with DI water and an oxidizer and/or an APX Slurry Modifying Additive, for specific metal schemes and design layouts. Special consultation should occur with an IDI technical representative for the correct recommendation on specialized projects to achieve satisfactory results.

#### **Benefits:**

- Adjustable removal rate of films
- Adjustable selectivity to barrier and oxide
- With the correct APX additive, no corrosion of liner materials
- Fast planarization of topography before breakthrough to barrier
- Low defectivity on metal and oxide
- Fully compatible with low k dielectrics
- Do not contain BTA
- Safe and economical to use
- Manufactured under ISO compliant program
- Certificates of Compliance available on every shipment

#### **Directions:**

It is recommended that evaluation of TENSOR AP Series Products begin with a process simulation test at Intersurface Dynamics Process Simulation Laboratory (PSL). At IDI's PSL, we can quickly obtain the process parameters and the slurry mixture best suited for a specific metal scheme/design layout. We can provide data that will help to qualify further testing and the eventual use of TENSOR AP Series Slurries.

#### **Additional Information:**

Intersurface Dynamics manufactures 3 product lines, TENSOR, VECTOR and CHALLENGE Series Products. Visit our web site at [www.isurface.com](http://www.isurface.com) for more information.

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