

For Electronics Polishing



Flexisil™ electronic-grade colloidal silica-based nano-abrasives are precision designed and formulated for the stringent requirements of today's polishing slurries, engineered to improve removal rates, and reduce wafer defects.

Innovative's state-of-the-art operational processes ensure rapid scale-up, flexible campaign sizes, and our commitment to exceeding the statistical quality/process control expectations of our valued partners. Flexisil can be manufactured to meet your specific metals content, modified surface chemistry, or tightly controlled particle size distribution. The entire Team at Innovative is fully committed to meeting your needs and ensuring the colloidal silica abrasive provides this for every load you receive, no matter the volume or packaging.

1. Statistical quality/process control

- Fully automated and computer controlled. DCS data is collected and reviewed real time to ensure that the finished product remains within narrow specifications.
- ISO certified with implemented MOC (Management of Change) and POR (Process of Record) for production consistency and quality control.

2. Nanoscale particle size (8–100 nm)

- Uniform particles and closely monitored particle size distribution maximize polishing consistency and predictable results.

3. Ultra-high purity

- Very low levels of metals, chlorides, and sodium minimize mobile ion or transition metal contamination.
- Longer shelf-life and consistent viscosity.

4. Surface charge control (anionic/cationic/modified)

- Enables selective polishing of oxides, metals, and dielectrics.

5. Stable aqueous dispersion

- Long-term stability under alkaline or acidic conditions.

6. Adjustable chemistry

- pH and additives can be fine-tuned for specific CMP processes.

7. Non-crystalline (amorphous silica)

- Produces defect-free and scratch-free surfaces.

8. Lower application cost

- High efficiency reduces the amount of slurry required per polishing cycle.
- A single grade can often benefit multiple steps, reducing inventory complexity.

Using Flexisil high-purity colloidal silica in a well-managed polishing slurry provides optimized removal rates, minimal defects, and less contamination.

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