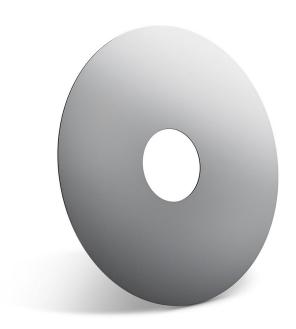
Nickel-Phosphorus Plated Substrate and Media Cleaning Solutions

Perform superior cleaning and protect nickel-phosphorus plated substrates from undesirable etch

Our hard disk drive (HDD) cleans are designed to be used after slurry polishing. They perform superior cleaning while protecting from undesirable etch. The formulation is designed to remove colloidal silica, nickel-phosphorus plated (Ni/P) swarf, slurry additives, suspension agents, and organic residues left or embedded on Ni/P disks during polishing. Our cleaning solutions reduce surface ion contamination and remove, suspend, and completely disperse contaminants. Cleaners are formulated to be used at ambient temperatures and are exceptionally free-rinsing.

APPLICATIONS

- Nickel-phosphorus plated aluminum
- Stainless steel, aluminum alloys, yellow metals, magnesium, ceramics, glass, various types of plastics
- Post colloidal silica or aluminum oxide slurry polishing
- Post-CMP clean lines (immersion, brush, spray, ultrasonic, megasonic)



FEATURES & BENEFITS

High performance surfactant technology	Allows high dispersion and free-rinsing
	Suspends and removes difficult-to-clean organic films, organic particulates, and inorganic particulates
	Reduces friction, allowing easy use in brush processes
Cleans effectively at ambient temperature	Minimizes dry-down residues
Corrosion inhibition package	Prevents corrosion and defectivity
	Extends equipment lifespan
	Designed for use with sensitive substrates
Well buffered cleaning solution	Has high impact at a variety of concentrations (generally 1-10%)



SPECIFICATIONS

Product	Key features
PCL 565	 Alkaline cleaner with high pH buffering stability Heavy duty surfactant used to clean alumina particles Corrosion protection Polymeric dispersants Chelants to prevent nickel ion redeposition
PCL 548	 Alkaline cleaner Highly rinsable surfactant Corrosion protection Low foam Chelants to prevent nickel ion redeposition
PCL 549-1	 Alkaline cleaner with minimal residual alkalinity Highly rinsable surfactant Surfactant package to remove organics Good etch rate Additives to prevent etched Ni from growing NiO Rinse aids to prevent staining
ACL 227-S2	 Neutral cleaner with buffer to hold pH stable Additives to prevent aluminum etch Additives to minimize passivation of aluminum layer Surfactants compatible with various PVA brush designs
ACL 227-2A	 Neutral cleaner Degreaser for aluminum and aluminum alloys
TCL 180	 Sulfuric-based acidic cleaner Removes organic contamination Low foaming surfactant Suitable for spray, ultrasonic, megasonic
TCL 185	 Citric-based acidic cleaner Removes organic contamination Low foaming surfactant Suitable for spray, ultrasonic, megasonic

FOR MORE INFORMATION

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