

VAPORSORB™ CMP CHEMICAL FILTERS

Chemical Mechanical Planarization (CMP) filtration solutions delivering complete protection against the full range of airborne molecular contaminants at 22 nm and below

Overview

As semiconductor process nodes have shrunk below 22 nm, the number of potential contaminants has increased, and the tolerable concentrations of those contaminants have decreased. It is necessary to protect both process equipment and wafers from the damaging effects of airborne molecular contamination.

Entegris tool AMC filters provide complete protection from common airborne molecular contamination (AMC) in the fab. Tool AMC filters utilize both standard filtration media and custom media blends to meet various AMC removal requirements. Entegris' vast fab expertise ensures the right selection, application and validation of solutions. In particular, Entegris has designed CMP tool AMC filters with a balanced media blend to target acid contaminants.

See It. Control It.

In an effort to deliver targeted solutions that control airborne molecular contamination, Entegris employs the data-driven *See it. Control it.* methodology.

SEE IT.

Measure AMC types and concentrations and monitor over time. Entegris is the only filter supplier with OEM-approved and ISO-accredited analytical laboratories.

CONTROL IT.

Remove AMC with targeted solutions. Entegris provides a full range of application-specific AMC filters to remove contaminants of concern.



Chemical Mechanical Planarization AMC Concerns

AMC	Effect	
Acids	Corrosion	

Practical Solutions for CMP Processes

VaporSorb™ CMP chemical filters can be configured to satisfy various installation requirements including tool-top, tool interface or in-tool housing in all equipment front-end modules (EFEMs) and process modules.

Features and Benefits

Features	Benefits	
Data driven See it. Control it. methodology	Provides tailored, application-specific filtration solutions that are optimized for cost of ownership	
Product backed by Entegris OEM-certified, ISO 17025-accredited laboratories	Provides assurance that all performance claims are verified with supporting data and in-field analytical support	
Optimized blend of high-performance adsorbents	Provides targeted contaminant removal	

Specifications

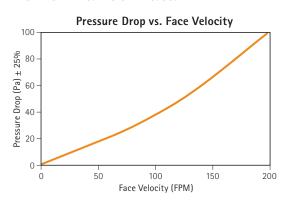
Materials

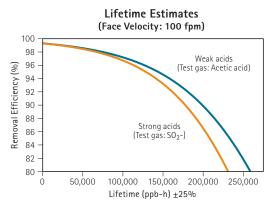
Casing:	Clear anodized aluminum	
Media:	Application-specific blends of high performance adsorbents	
Cover screens:	Clear anodized aluminum and polyester scrim	
Gasket:	Closed cell polyethylene	

Physical Performance

Parameter	At	Target
Air velocity distribution:	9 points 0.1 m downstream of filter @ 0.5 m/s face velocity	Uniform distribution, variation ~0
Temperature/humidity variation:	30-70% RH	<10% service life degradation
	18°C-35°C (64°F-95°F)	
Dust generation:	Particles per m ³	ISO 5-compliant
Metal contaminants:	None detected	<1 ng/L air

Performance Data





For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit *www.entegris.com* and select the Customer Service link for the center nearest you.

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