Entegris

VAPORSORB™ II-ABC LITHOGRAPHY TRACK CHEMICAL AIR FILTERS

Superior protection against the full range of total molecular gas phase acids, bases and condensable organics

Overview

VaporSorb™ II-ABC lithography track chemical air filters provide superior protection against the full range of total molecular gas phase acids, bases and condensable organics.

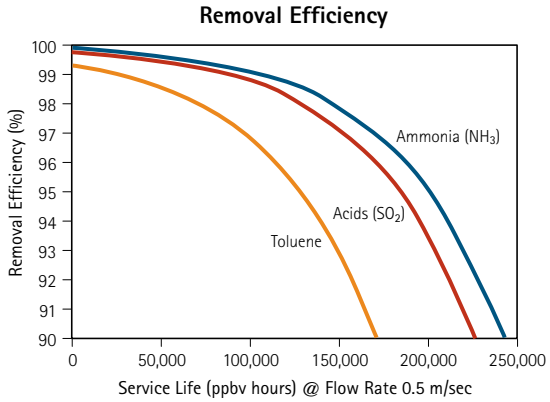
VaporSorb II-ABC Track/Coat/Develop chemical air filters are designed to Tokyo Electron® specifications and incorporate a patent-pending polymer media which is completely dopant- and outgas-free.

These high-performance filters remove airborne amines, inorganic acids and organics to the sub-parts-per-billion range.

Key Features

- Protects against full range of total molecular gas phase acids, bases and condensable organics
- Guaranteed performance (when properly installed in accordance with OEM specifications)
- Guaranteed configuration fit of filter sizes for all lithography coat-and-develop tracks
- Long service life eliminates tool interruptions and lowers cost of ownership

Performance Data



CAPTURED CONTAMINANTS*

Acids	Amines	Condensable Organics**
Hydrochloric	Ethylamine	PGMEA
Hydrofluoric	Diethylamine	Benzene
Sulfur dioxide	Ammonia	Butylated hydroxytoluene (BHT)
Nitric	NMP	Heptadecane

**Examples of common contaminants captured.*

***C6–C30*

Specifications

MATERIALS

Casing	0.060" clear anodized aluminum
Media	CSP35
Cover screens	0.060" clear anodized aluminum
Gasket, if used	0.25" x 0.5" closed cell polyethylene, downstream side only
Handle, if used	3/8" black nylon, end of filter, on center

CHEMICAL AND MECHANICAL PERFORMANCE

Parameter	At	Target
Air velocity distribution	9 pts 0.1 m downstream of filter @ 0.5 m/sec	Uniform distribution: Variation ~ 0
Pressure drop	0.5 m/sec	<50 Pa
Initial efficiency, acids	100 ppbv SO_2 @ 0.5 m/sec	>99% removal efficiency (RE)
Service life, acids	11 ppbv SO_2 @ 0.5 m/sec	>90% RE for >2.5 years
Initial efficiency, bases	1000 ppbv NH_3 @ 0.5 m/sec	>99% RE
Service life, bases	10 ppbv NH_3 @ 0.5 m/sec	>90% RE for >2.5 years
Initial efficiency, condensables	26 ppbv @ 0.5 m/sec	>99% RE
Service life, condensables	3 ppbv @ 0.5 m/sec	>90% RE for >2.5 years
Temp/humidity variation	30–70% RH 18–35°C	<10% service life degradation
Dust generation	0.1 µm particle per ft^2	<10 detected 1 meter downstream
Metal contaminant	None detected	<0.1 ng/L air

Note: Service life estimates are based on laboratory and field tests of similar adsorbent configurations.

Ordering Information

Part Number	Height (mm)	Width (mm)	Gasket	Weight (kg)	Strap Handle
ESI004445-01	360	620	No	8	No
ESI004445-02	460	360	No	6	No
ESI004445-03	400	1120	No	15	No
ESI004445-04	460	620	No	10	No
ESI004445-05	460	385	No	6	No
ESI004445-06	460	460	No	8	No
ESI004445-07	615	310	No	7	No
ESI004445-08	615	155	No	4	No
ESI004445-09	385	620	No	9	No
ESI004445-10	605	905	No	18	Yes
ESI004445-11	530	530	No	9	No
ESI004445-12	460	620	Yes	10	No
ESI004445-13	460	385	Yes	6	No
ESI004445-14	460	460	Yes	8	No
ESI004445-15	615	310	Yes	7	No
ESI004445-16	460	360	Yes	6	No
ESI004445-17	360	620	Yes	8	No
ESI004445-18	615	155	Yes	4	No
ESI004445-19	385	620	Yes	9	No
ESI004445-20	400	1120	Yes	15	No
ESI004445-23	630	710	No	18	No
ESI006399-01	270	720	No	10	Yes
ESI006399-02	360	620	No	11	Yes
ESI006400-01	360	200	No	4	Yes

Note: Measurements are made from middle-to-middle of each side segment. All filters' depth measurements are 155 mm.

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.

Terms and Conditions of Sale

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, *visit www.entegris.com* and select the Legal Notices link from the footer.

ENTEGRIS, INC.
Corporate Headquarters | 129 Concord Road | Billerica, MA 01821 USA
Customer Service Tel. +1 952 556 4181 | Customer Service Fax +1 952 556 8022
In North America 800 394 4083 | *www.entegris.com*

Entegris
creating a material advantage