



## VAPORSORB™ II-VP LITHOGRAPHY TRACK CHEMICAL AIR FILTERS

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

### Overview

VaporSorb™ II-VP lithography track chemical air filters provide full range protection against Total Molecular Base (TMB) contaminants.

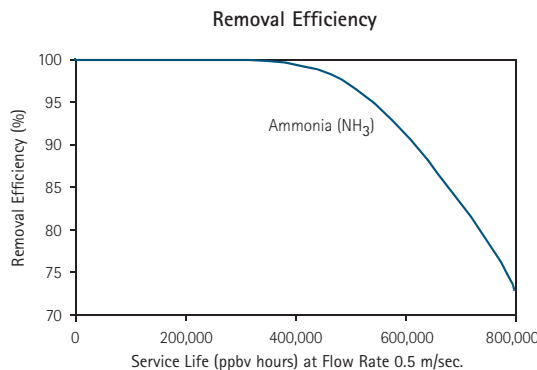
VaporSorb II-VP Track/Coat/Develop chemical air filters are designed to Tokyo Electron® specifications and incorporate a patent-pending polymer media which is completely dopant- and outgas-free, providing superior protection against the full range of TMB, gas phase contaminants.

These high-performance filters are the second generation VaporSorb II-VP filters utilizing design-for-manufacture and common materials of construction to provide an improved cost of ownership, yet offer the same ability to remove airborne molecular ammonia and organic amines to the sub-part-per-billion range.

### Key Features

- Protects against the full range of TMB gas phase contaminants
- 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\*

##### Amines

Ethylamine

Diethylamine

Ammonia

NMP

*\*Examples of common contaminants captured.*

## Specifications

### MATERIALS

Casing	0.060" clear anodized aluminum
Media	VaporSorb II
Cover screens	0.060" clear anodized aluminum, 1 layer without scrim
Gasket, if used	0.25" x 0.5" closed cell polyethylene, downstream side only

### CHEMICAL AND MECHANICAL PERFORMANCE

Parameter	At	Target
Air velocity distribution	9 pts 0.1 m downstream of filter at 0.5 m/sec.	Uniform distribution: Variation ~ 0
Pressure drop	0.5 m/sec.	<50 Pa
Initial efficiency bases	1000 ppbv NH <sub>3</sub>	>99%
Service life, bases	10 ppbv NH <sub>3</sub> @ 0.5 m/sec.	>90% RE removal efficiency (RE) for > 60,000 hours
Temp/humidity variation	30 – 70%RH 18 – 35°C	<10% service life degradation
Dust generation	0.1 µm particle per ft <sup>2</sup>	<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.*

## For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [www.entegris.com](http://www.entegris.com) and select the "Customer Service" link for the center nearest you.

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## Ordering Information

Part Number	Height (mm)	Width (mm)	Depth (mm)	Gasket	Weight (kg)	Strap Handle
ESI002425-01	360	620	155	No	8	No
ESI002425-02	460	360	155	No	6	No
ESI002425-03	400	1120	155	No	15	No
ESI002425-04	460	620	155	No	10	No
ESI002425-05	460	385	155	No	6	No
ESI002425-06	460	460	155	No	8	No
ESI002425-07	615	310	155	No	7	No
ESI002425-08	615	155	155	No	4	No
ESI002425-09	385	620	155	No	9	No
ESI002425-10	605	905	155	No	18	Yes
ESI002425-11	530	530	155	No	9	No
ESI002425-12	460	620	155	Yes	9	No
ESI002425-13	460	385	155	Yes	6	No
ESI002425-14	460	460	155	Yes	7	No
ESI002425-15	615	310	155	Yes	7	No
ESI002425-16	460	360	155	Yes	6	No
ESI002425-17	360	620	155	Yes	8	No
ESI002425-19	385	620	155	Yes	9	No
ESI002425-20	400	1120	155	Yes	15	No
ESI002425-21	610	305	155	No	6	No
ESI002425-23	630	710	155	No	15	No
ESI002425-24	520	460	155	No	8	No
ESI004431-01	720	270	155	No	10	Yes/No
ESI004431-02	620	360	155	No	11	Yes/No
ESI004432-01	200	360	155	No	4	Yes/No

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