

# VaporSorb™ FES Chemical Filters

*Fire emissions and smoke (FES) filters provide complete protection against the full range of airborne molecular contamination (AMC) caused by fires*

Man-made or wild vegetation fires produce a very large amount of pollutants that can have a significant impact on any industrial operation or process. These fires produce not only particulate matter but also many gas-phase contaminants, the combination of which we know as smoke. In addition to oxygenated gases (CO<sub>2</sub>, H<sub>2</sub>O, NO<sub>x</sub>, SO<sub>x</sub>), very volatile, volatile, and condensable gases are emitted. The AMC caused by fires can also have a global impact when it reaches the altitudes of the jet stream.

Our VaporSorb™ FES chemical AMC filters help control AMC by providing protection from acids and organics. They target gas-phase contaminants of concern for each process and minimize waste, lowering cost of ownership.

## APPLICATIONS

- Return air handler (RAH) applications
- Make-up air (MAU) applications
- Industrial environments



*VaporSorb filters help control AMC by removing gas-phase contaminants.*

## FEATURES & BENEFITS

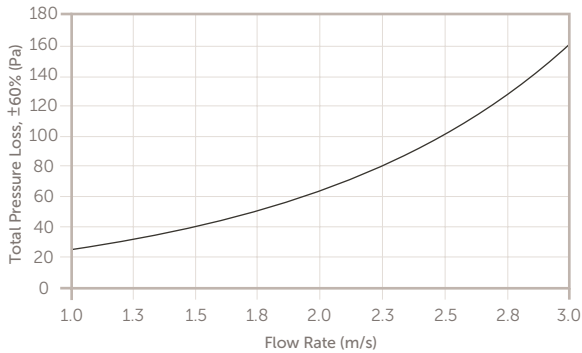
<b>Full-range protection from acids and organics</b>	Decreases process and equipment defects Increases yield Prolongs equipment life and reduces maintenance and downtime
<b>Application-specific filters with optimized blend of adsorbents</b>	Targets and removes contaminants of concern for each process Minimizes media waste, lowering cost of ownership
<b>Flexible configurations for any FFU, process tool, or factory installation mounting</b>	Simplifies installation and integration
<b>Data driven <i>See It. Control It.</i> methodology</b>	AMC measurement provides tailored solutions that are optimized for customer environment. Minimizes media waste, lowering cost of ownership Provides insight into filter performance and end of life decision
<b>Entegris-owned filter manufacturing</b>	Provides quick turnaround of application-specific, optimized media Provides direct media and product support and expertise
<b>ISO® 17025-accredited laboratories</b>	In-field AMC measurement identifies and quantifies actual contaminants and their concentrations Provides assurance that all filter performance claims are verified with supporting data Greatly exceeds qualitative evaluation using corrosion strips

## SPECIFICATIONS

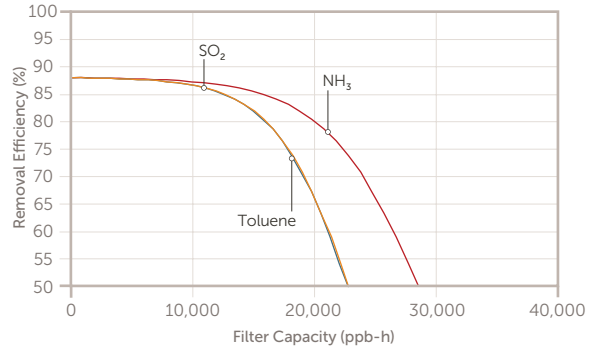
Nominal size	242412	241212
Targeted air flow	3400 m <sup>3</sup> /h (2000 cfm)	1700 m <sup>3</sup> /h (1000 cfm)
Targeted face velocity	2.54 m/s (500 ft/min)	2.54 m/s (500 ft/min)
Height	592 mm (23.312")	287 mm (11.312")
Width	592 mm (23.312")	592 mm (23.312")
Depth	287 mm (11.312")	287 mm (11.312")
Weight	14.5 kg (32 lbs)	9.1 kg (20 lbs)
Pressure drop	110 Pa @ 2.54 m/s (500 ft/min)	110 Pa @ 2.54 m/s (500 ft/min)

## PERFORMANCE DATA

### Pressure vs. Flow



### Chemical Capacity\*



\*Entegris expresses filter AMC capacity as the product of challenge concentration and time, the unit is ppb-h (parts per billion-hours; ppb =  $10^{-9}$  mols per mol of air). With that number, and the desired end-of-life removal efficiency, the user can calculate lifetime in hours by using their measured onsite AMC concentration.

### FOR MORE INFORMATION

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

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