High Performance Filter Media for severe sampling applications

Application:

Many sample draw gas sampling applications originate in an extremely hostile environment with high temperatures and corrosive samples, saturated with water or loaded with particulate. Any combination of the above conditions can make sample extraction and treatment difficult. Because of the complications that arise when sampling in an adverse environment, MSA has developed a solution. A highly efficient, pre-filter to be used at the sample take-off point, can withstand the most severe environments and will not react with the sample.

Solution:

Used in conjunction with a metal sample probe, the effectiveness of the filter media in trapping particulate and blocking liquid water, without being attacked by the corrosive gas stream, is unique to this material. Its resistance to temperature extremes is exceptional and is perfect for extending the service life of expensive porous metal probes. This has been utilized in medical waste incinerator applications, with elevated acid gas levels combined with excessively high water content. Furthermore, it has proven successful when used in the waste water treatment industry with the characteristic combination of corrosive gases and swill and in solvent vapor-laden exhaust ducts.



Properties of HP Filter Media

Physical			
	Thermal Conductivity (cal / sec \cdot cm \cdot °C)	6 x 10-4	
	Thermal Expansion (% / °C)	10 x 10-5	
	Continuous Use Temperature	290°C	
	Low Temperature Limit	- 200°C	
	Flammability	Non-Flammable	
	Porosity	25 – 45µ	

Environmental

Resistance to:		
Cold Flow	Excellent	
UV Radiation	Excellent	
Nuclear Radiation	Poor	
Electrical-Mechanical Stress Cracking	Excellent	
Chemical-Mechanical Stress Cracking	Excellent	
Abrasion	Good	
Fungus	Excellent	
Chemicals	Excellent	



Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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