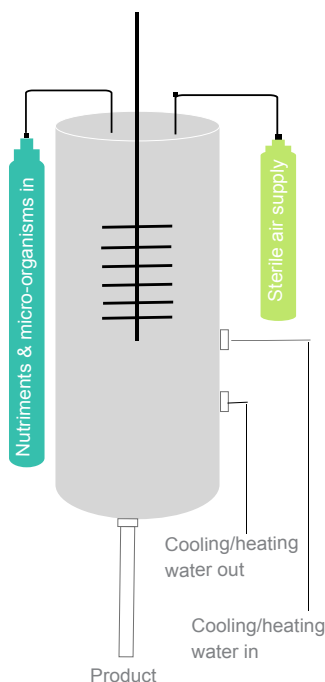




## Tank Vent/Gas Filtration for the Fine Chemical Industry

In the chemical industry, it is critical to filter tank vents and process gases to prevent particulate and microbial contamination and help ensure product sterility and quality. Global Filter's product solutions help protect the process from contaminants while extending service life and reducing operations costs. Global Filter designs and manufactures filter elements and vessels that are widely used in the chemical industry and our years of industry expertise will help to optimize your manufacturing process.

In the chemical industry, many processes are interrelated. As a result, impurities from one process stream could negatively impact neighboring process lines which can lead to unwanted contamination, CIP procedures, product loss and decreased revenue. Highly efficient filtration systems at critical points in these chemical processes can help mitigate these risks by increasing particulate removal efficiency while improving effluent quality and reducing unnecessary maintenance.



### Tank vents used in the fine chemical industry require proper filtration for two main reasons

- Prevent process ingredients from being released into the environment, which can harm employees when tanks are filled.
- Prevent potential particulate and microbial contaminants, like bacteria and viruses, from entering the tank, potentially contaminating the liquids inside. For this step, we offer a range of hydrophobic polysulfone and [PTFE](#) membrane cartridges.

### Process gases used in the fine chemical industry also require proper filtration

- The installation of proper bioburden or sterilizing-grade filters protect process lines and tanks.
- Optimized filtration is crucial for helping reduce or remove bacteria or other harmful contaminants that would otherwise negatively impact product quality and safety.

### To chose the appropriate filters for tank vents or process gas, several factors need to be taken into account:

- The presence of microbial contaminants in the surrounding environment
- Concentration of particulate or contaminants
- Propensity for bacterial growth due to gas/air composition
- Cleaning/Sterilizing methods and frequency plus duration of cleaning cycles
- Process flow rate, operating pressure, and specifications of air/gas



# Tank Vents/Gas Filtration For The Fine Chemical Industry

Global Filter designs innovative and efficient filtration solutions. The quality of our products combined with our industry expertise, allows you to optimize your process and the filter life cycle. This helps promote a reduction in waste material while increasing productivity. Moreover, the quality and consistency of our products is an important factor to consider for maintaining process reliability.

## Choosing Filter Cartridges for Process Gas & Tank Venting

### Filters For Tank Vents

We develop innovative and efficient solutions that prevent contamination of your products by insuring tank vent air is clean and dry. Our range of [PTFE](#) membrane cartridges provides control for tank vents to prevent contamination from ambient air. The single layer [PTFE](#) membrane delivers superior hydrophobicity versus polypropylene or PVDF, making it an optimal choice for reducing moisture. [PPTFE](#) elements are fully validated as sterilizing grade filters in liquids in accordance with HIMA and ASTM F838-05 guidelines and in gases through full retention on the MS2 phage in an aerosol challenge. Our [BRPTFE](#) Series also offer a [PTFE](#) membrane with a proven 7.4 LRV retention of aerosolized bacteriophage, providing reliable bioburden reduction and prevention of process contaminants.

### Filters For Process Gases

Our high purity [hydrophobic polysulfone](#) membrane filter cartridges ([PSH-Series](#)) offer an excellent solution for particulate capture in gas applications. The highly asymmetric membrane pore structure provides high flow rates and very low pressure drops. It is a more cost effective solution compared to hydrophobic [PTFE](#) membranes when bacterial retention or steam sterilization requirements are less stringent.

### Filters For Prefiltration:

As a prefiltration step, we recommend using our range of absolute rated polypropylene ([PP](#)) or microglass ([EG](#)) pleated depth cartridges (0.2-40 microns). Cartridges require endcap support ring for steam sterilization.

## Advantages of Working With Us

- Manufacturing facilities in Europe, North America and Japan
- Competitive prices and highest value in the industry
- The design, development and manufacture of all our products meet the construction standards D.E.S.P 2014/ 68/EU, NSF, USP, FDA, CE 1935/ 2004
- Technical support from initial conversations to implementation and beyond
- Our solutions are based on our expertise & experience as well as laboratory and industrial tests
- We are able to offer products for small & specific production as well as for high volumes productions

## Advantages of Our Pleated Products

- Rating down to 0.02 micron
- Range from prefiltration to sterilizing grade
- Manufactured according to major EU and US regulatory standards
- Wide range of available medias and configurations for all applications