BLINEX FILTER-COAT PVT LTD from Mumbai INDIA is a leading manufacturer of Sintered porous plastic filters materials and elements since the past 38 years for air, gas, oil and water including standard and custom molded parts plus slabs, rods, bars, tubes and sheets, Discs, Domes, and Hollow Cylinders for filtration of Water, Air and Chemicals.

Self-sealing media in this invention are defined as porous media that allow air and gas to pass through when the media are dry and do not allow air, gas or solutions to pass through when the media contacts aqueous based or organic solvent-based liquid solutions, for example under suction forces or pressure. The suction forces are vacuum or negative pressures. The new organic solvent self-sealing media of the present invention can block inorganic and organic solutions containing organic solvent concentrations of about 40% or greater.

Use of these self-sealing media provides a safer environment for transfer of highly corrosive inorganic acids and organic acids.

A syringe tip cap and a method for purging air from a syringe-like container containing air and hazardous liquid. The cap contains a hydrophilic filter which, when dry, allows air to pass through the filter. When the air is purged from the syringe, liquid from the container is pushed or drawn to the filter. The filter expands when wetted, seals the cap, and prevents further fluid flow. A flow restrictor may be included within the cap to concentrate the flow to only a portion of the filter to prevent premature sealing of the filter.
Devices Comprising Self-sealing Media

The self-sealing media can be incorporated into numerous devices. The self-sealing media can be placed into a housing inside a device. These include, but are not limited to, containers, pipette tips, valves, vents, liquid delivery systems, and syringe caps.

Since the self-sealing media are porous, they can act as a safety valve. Since these media are porous, they permit the passage of gas, thereby functioning as a vent. If the container were to tip, the porous self-sealing media would seal upon contact with the organic fluid, thereby preventing or retarding the organic solvent from spilling out of the container.

The self-sealing media are used as a vent for an acid based battery, such as a car battery, a golf car battery and a truck battery. In this embodiment, the self-sealing media allows gas to pass in a normal position to prevent dangerous hydrogen gas from building up inside the battery. At the same time the self-sealing media also block the leaking of hazardous acids when the automobile is involved in an accident or the battery is tipped over during transport. Current acid battery vents do not block the leakage of acid.

The self-sealing media are used as a pipette tip filter to prevent handheld pipettors or automatic liquid pipetting machines from contamination by accidental over pipetting of solutions containing inorganic or organic acids.

The term “self-sealing” porous plastic is used as a design option for a venting of filtering application. The material is used in a variety of applications from pipette tip filters, to catheter vents, to hospital suction canister valves.

Medical & Diagnostic

Most of our products are available from FDA approved polymers and are suitable for various medical applications eg self-sealing hospital vacuum canister filter valves, and filtration of bodily fluids.

Syringe vents

Another application of our self-sealing material: The self-sealing plug seals immediately upon contact with blood, preventing withdrawal of excess blood and the potential risk of the blood contact to healthcare workers.

Overflow Protection filters

Our self-sealing materials provide a dual-purpose safety valve (eg in hospital vacuum canisters) by preventing upstream contamination in vacuum systems and also preventing flow when in contact with liquid (ie when the canister is full).

Our Range of Sintered Porous Plastic Products ..... and many more Applications ...