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Porous Plastic Fluid Collection Vents Ensure Suction Cannister Safety

Working closely with a medical device manufacturer, Porvair Sciences has developed a high-performance fluid collection vent for a surgical suction cannister using their proprietary Vyon® porous plastic.



A large fraction of the waste

produced during surgery is in the form of liquids such as blood and bodily fluids that have been diverted during the operation. A single surgery can produce as much as 3-4 litres of liquid waste which is often disposed of by either manually pouring out the contents of the suction canisters or by solidifying the contents before disposal. Both methods can pose significant health and safety risks as spills and splatters can easily occur, leading to the aerosolization of bloodborne pathogens.

One key component

of suction cannister design is the valve found embedded in the lid which functions to maintain system integrity and prevent over spilling. This ensures the safety of both the vacuum system lines and the users by sealing off the cannister.

Working closely with the medical device manufacturer,

Porvair leveraged the unique liquid-swelling properties of their Vyon® porous plastic to create a composite-based filter that could act as a vent that provided both optimal airflow and an effective seal for fluids contained within the suction canister. In this novel medical device, when collected surgical fluids reach critical levels and come into contact with the Vyon®, the filters inherent shut-off capabilities prevent unwanted fluid transmission.



The new Vyon® fluid collection vents,

used as a recyclable single use product, have been found to offer an easily installed, safer, sturdier and cost-effective alternative to traditional mechanical valves.

To discuss your healthcare application, and how a bespoke Vyon® component can help improve your products performance and competitiveness, please contact Porvair Sciences Ltd on +44-1978-661144 or enquiries@porvairsciences.com

Porvair Sciences

are global leaders and original manufacturers and developers of cutting-edge porous plastics technologies. With patents dating back to the 1950's, our porous plastics continue to evolve, adapt and respond to changes in technologies, markets and customer needs. Empowered by 50 years of industrial experience, we strive to continue delivering world class, high performing products while providing superior customer service, every step of the way. Our diverse team of scientists, engineers and creative thinkers are committed to providing expert solutions that brings value and integrity to our customers.

For further information

please visit <https://www.vyonporousplastics.com/medical-and-healthcare/>

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