Solvent Technology to Swell Polyurethane Tubing

MicroCare Medical, a division of MicroCare Corporation that supplies advanced cleaners, carrier fluids, coatings and lubricants to medical device designers, engineers and manufacturers, has announced the launch of Swellex™-P polyurethane swelling agent which will debut during MD&M Minneapolis, the most comprehensive resource for every aspect of medical device development.

Swellex™-P polyurethane swelling agent is a swelling agent that is absorbed into the polyurethane, expanding it to a desired dimension, which then allows easy assembly to the fitting or rigid part. The Swellex™-Ppolyurethane swelling agent then quickly evaporates, returning the polyurethane component to its original size to create a secure connection without adhesives. This new capability agent to swell polyurethane addresses the challenge that design engineers face inworking withpolyurethane tubing on assemblies applications.

“Polyurethane is becoming a more desirable material in the medical device industryas a replacement for PVC, especially in tubing applications for moving fluids” said Thomas Tattersall, executive vice president of MicroCare Medical.“However, the physical properties of polyurethane can make it a challenge to work with. Our Swellex™-Ppolyurethane swelling agentprovides an effective and overall low cost solution to that challenge.”

Polyurethanetypically has high tensile strengthand does not readily expand without mechanical help, and because of this, design engineers often find difficulty in attaching polyurethane tubing with barbed fittings. For designers, knowing that there is an effective solution to joining polyurethane to rigid parts means they can be more flexible in their specifications and can design without limitations.

Swelling polyurethane is a cost-effective option because the entire process is extremely quick and involves almost no “housekeeping.” Other methods, like using oils or alcohol to lubricate the polyurethane, take much longer because of the time necessary for these lubricants to dry. These methods also tend to be very messy, requiring clean up once the part has been joined, which also adds more time to the entire process.

The Swellex™-Ppolyurethane swelling agent that MicroCare Medical provides is a newer class of solvent that utilizesproprietary solvent technology that swellspolyurethane more effectively than alternative solvents, and meet today’s strict Environmental Protection Agency regulations.

“Historically, solvents are not used to swell polyurethane because of its resistance to solvents.” said Jay Tourigny, senior vice president for MicroCare Medical.“We are very proud to be able to offer a solution that is engineered to work specifically with polyurethane-based compounds.”

To learn more about MicroCare Medical, including theSwellex™-Ppolyurethane swelling agent, Swellex™silicone swelling agent,Duraglide® dry lubricants and SpecClean™ silicone carrier fluid being featured at MD&M Minneapolis, stop by booth # 949.You can also visit the MicroCare Medical Web site at www.microcaremedical.com [1].

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