Silicone Elastomer Bases for Wider Processing Flexibility

MDT Staff

Dow Corning, a global leader in silicones, silicon-based technology and innovation for the healthcare industry, announced at MD&M West Dow Corning® QP1 Silicone Elastomers, a new silicone technology for the company's high consistency rubber (HCR) product line. Well suited for medical tubing and other extruded applications – including short-term implants – the one-part QP1 HCR bases are supplied uncatalyzed to offer medical device OEMs and fabricators processing flexibility, enabling them to choose the most suitable formulation for each application. The materials provide high strength and can be platinum catalyzed using Dow Corning masterbatches. Alternatively, the products can be cured using a peroxide initiated system.

Dow Corning® QP1 Silicone Elastomers are also U.S. Food & Drug Administration (FDA) food contact compliant by formulation and are USP Class VI tested. For even greater choices, the materials are available in four durometers for a range of hardnesses.

"Our new QP1 silicone elastomer products were designed to give customers more

options to meet changing requirements and market trends for medical devices, while also addressing the healthcare industry's need for greater manufacturing freedom," said James Stephenson, global market director, Dow Corning Healthcare. "Giving our customers the opportunity to select from different material properties, cure systems and fabrication methods permits a high level of tailoring and differentiation that can increase quality, efficiency and productivity to help give them a strong competitive edge."

Customers choosing to work with platinum catalyzed HCRs can select the company's platinum masterbatches including Dow Corning® QP1-47 Cross Linker, Dow Corning® QP1-48 Cure Controller and Dow Corning® QP1-51 Catalyst. These four-component platinum systems offer fabricators fine-grained control over multiple factors: cure curve, hardness, elongation and tensile strength. Peroxide initiated systems provide a cured product with good strength. Typically, a two-roll mill is used for blending.

The new QP1 HCR bases, supplied in Shore A hardnesses of 30, 50, 60 and 70, are formulated without the use of solvents, phthalates or latex additives. They meet FDA 21 CFR 177.2600 requirements for food contact components and devices.

Applications for the QP1 HCR grades include short-term (29 days or fewer) implants, such as surgical incision drains and catheters, as well as non-implant devices such as fluid handling tubing.

For more information, visit dowcorning.com [1].

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