Specialists in Seals & Service

Hi-Tech Seals Inc.

Achieving Improved Low Temperature Capabilities

Doesn't Have to Mean Compromising It's Integrity

Freezing temperatures are known for being unkind to elastomeric sealing components. When the temperature drops below the compounds' capabilities, their physical properties can be jeopardized. Elastomers can become more plastic-like, resulting in reduced flexibility, increased brittleness, and diminished rebound. This can reduce the component's ability to hold a proper seal, leading to leakage, unnecessary downtime, and potentially costly equipment failures.

In an attempt to enhance the low-temperature performance of elastomers, some providers seek to modify their composition or durometer by using standard polymers along with additives. While this approach may enhance the elastomer's ability to withstand freezing temperatures, it can also have adverse effects on other material properties. When not done properly, reformulating a material's composition can mean sacrificing crucial material capabilities, such as:

- High temperature rating
- Resistance to certain chemical attacks
- Pressure handling capabilities

Achieving an improved low-temperature range can be obtained without sacrificing a compound's integrity. When formulated with specialty polymers, elastomers can thrive in temperatures below the standard temperature range without compromising quality or other key material benefits.

A prime example of this is our V717 and V9M2 fluorocarbon (FKM) compounds. They are formulated with Viton™ GLT polymer. This improves the seals' low-temperature capabilities while maintaining high-temperature ranges and other physical properties.

For more information on how to increase performance in freezing temperatures using our V717 and V9M2, contact us at *info@hitechseals.com*.

MADE WITH Viton Fluoroelastomer A brand of The Chemours Company

LOW TEMP TESTED