

## Saint-Gobain Korel® K40-20 Medium Deflection Micro-cellular Polyurethane Foam

Category: Polymer, Thermoset, Polyurethane, TS, Thermoset Polyurethane Foam, Unreinforced

## **Material Notes:**

Description: The Korel® series micro-cellular polyurethane foams are offered in a broad range of properties, making them ideal for a variety of gasketing and energy absorption needs. Korel® microcellular foams are categorized by degree of deflection force. By varying the modulus and density, Saint Gobain Performance Plastics has developed this series of materials that meets the demands of design engineers today. All Korel fians are available with an aggressive acrylic adhesive on one side to facilitate placement. Korel K40 series is a medium deflection urethane foam with minimal compression set. As with the K30, this series also offers low out-gassing and exceeds fogging requirements.FEATURES/BENEFITS:Excellent compression set resistanceHighly resilient (will not collapse)Dissipates stressesResistant to moisture and most chemicalsConformable and flexible even in extreme environmental conditionsEasy to achieve intricate die-cut partsAggressive acrylic adhesive (optional) facilitates assemblyAvailable cast on to polyester film for stability and low deformationTypical Applications: Cellular telephones, electrical enclosures, electronic gasketing, vibration damping, cushioning, acoustical control, bumpers, instrument panels, spacers.Specification Notes: Passes Fogging Test SAE-J 1756, 3 hrs. at 212°F (100°C). All data based on a 0.125 inch test sample.(Available in multiple thicknesses.) Information provided by Saint Gobain Performance Products.

Order this product through the following link: http://www.lookpolymers.com/polymer\_Saint-Gobain-Korel-K40-20-Medium-Deflection-Micro-cellular-Polyurethane-Foam.php

Physical Properties	Metric	English	Comments
Density	0.332 g/cc	0.0120 lb/in³	ASTM D1667
Water Absorption	10 %	10 %	% by weight; ASTM D3574

Mechanical Properties	Metric	English	Comments
Hardness, Shore O	53	53	ASTM D2240
Tensile Strength, Yield	1.37 MPa	198 psi	ASTM D3574
Elongation at Break	380 %	380 %	ASTM D3574
Tensile Modulus	0.000586 GPa	0.0850 ksi	ASTM D3574
Compressive Strength	0.0689 MPa	10.0 psi	Compression Deflection, Value given for 12.7 mm/min, 25% deflection.; ASTM D3574 Test C
Compressive Modulus	0.000124 GPa	0.0180 ksi	Force to Compress, Value given for 25% compression; ASTM D1667
Tear Strength	4.56 kN/m	26.0 pli	Initial Tear Strength; ASTM D624 Die C
Compression Set	<= 2.0 %	<= 2.0 %	Constant Deflection at 73°F; ASTM D 3574 Test D
	<= 7.0 %	<= 7.0 %	Constant Deflection; ASTM D 3574



Mechanical Properties	@Temperature 70.0 Metric	English @ Pelmperature 158 °F	Comments
Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.0865 W/m-K	0.600 BTU-in/hr-ft²- °F	ASTM E1530
Maximum Service Temperature, Air	70.0 °C	158 °F	Constant use
	121 °C	250 °F	Intermittent

Electrical Properties	Metric	English	Comments
Volume Resistivity	3.20e+14 ohm-cm	3.20e+14 ohm-cm	
Surface Resistivity per Square	1.50e+13 ohm	1.50e+13 ohm	
Dielectric Strength	1.85 kV/mm	47.0 kV/in	ASTM D149

Descriptive Properties	Value	Comments
Standard Color	Black	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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