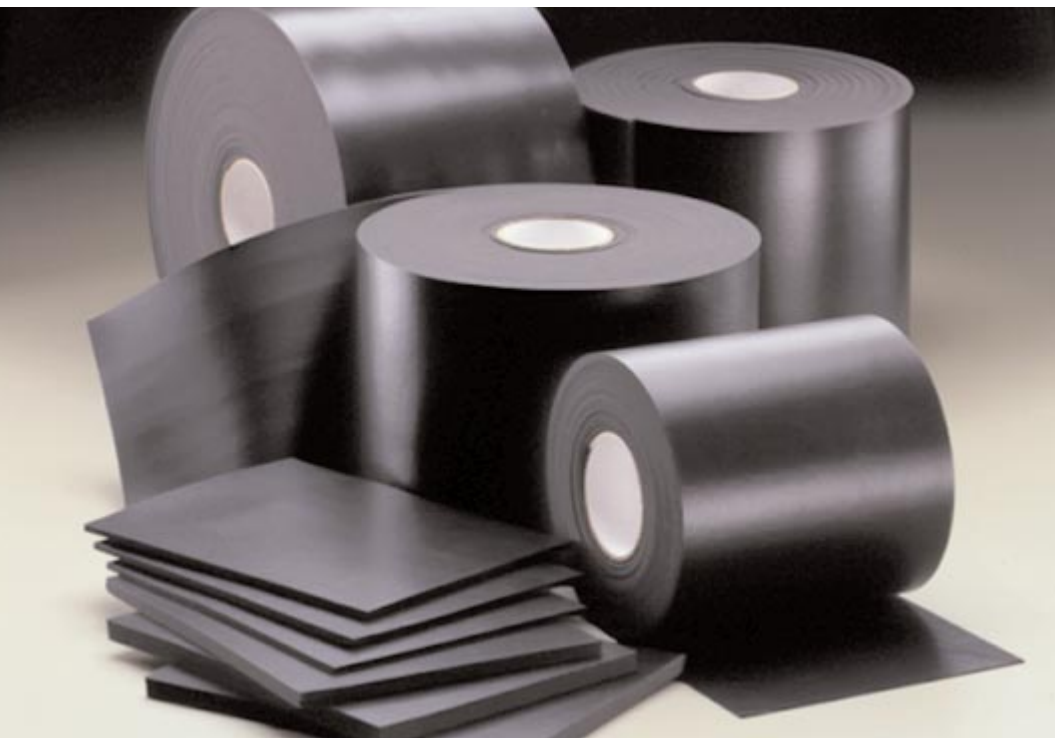


# Korel® K20 Series



## Korel® K20 Series Micro-cellular Polyurethane Foams

Korel® K20 foams are very soft and highly conformable, with a very low force to deflect. Korel K20 is recommended for closure of irregular surfaces or flexible materials.

**Gasketing** – Korel® has excellent resistance to compression set and high resiliency that ensures the seal will not break down over extended use, making it a preferred choice for gasketing applications.

**Control of Unwanted Energy** – The Korel® line of cushioning foam is ideal for controlling unwanted energy. These special formulations protect sensitive components by damping shock, dissipating motion, isolating vibration, and absorbing impact energy.

Non-standard products (optional – liners, adhesive, or color) can be produced by special order. Minimum and extended lead times may apply.

## Other Korel® Foams

Saint-Gobain has developed a full line of Korel micro-cellular foams. By varying the modulus and density, we have created a broad product group that is categorized by degree of deflection force.

## *Engineered for High Performance Gasketing Applications*

### Features/Benefits

- Excellent compression set-resistance
- Highly resilient (will not collapse)
- Dissipates stresses
- Resistant to moisture and most chemicals
- Conformable and flexible even in extreme environmental conditions
- Easy to achieve intricate die-cut parts
- Aggressive acrylic adhesive (optional) facilitates assembly
- Available cast on to polyester film for stability and low deformation

### Typical Applications

- Cellular Telephones
- Electrical Enclosures
- Electronic Gasketing
- Vibration Damping
- Cushioning
- Acoustical Control
- Bumpers
- Instrument Panels
- Spacers

## Korel® K20 Series Micro-cellular Polyurethane Foams

Property	Test Method	Korel® K20
<b>Physical</b>		
Density, lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	ASTM D3574	20 (320)
Thickness, inches (mm)		.063 (1.6)
		.080 (2.0)
		.093 (2.4)
		.125 (3.2)
		.140 (3.6)
		.188 (4.8)
		.250 (6.4)
		.375 (9.5)
		.500 (12.7)
Standard Color		Black
Compression Set, %	ASTM D3574 Test D	
@ 73°F (23°C)		<2
@158°F (70°C)		<10
Compression Force Deflection, psi (kPa)	ASTM D3574 Test C	
12.7 mm/min @ 25% Deflection		3 (20)
Force to Compress @ 25%, psi (kPa)	ASTM D1667	4 (30)
Hardness, Durometer	Shore "O"	7
Tear Strength, pli (kN/m)	ASTM D624 Die C	11 (2.0)
Tensile Elongation, %	ASTM D3574	250
Tensile Strength, psi (kPa)	ASTM D3574	35 (280)
Modulus psi (kPa)	ASTM D3574	20 (140)
<b>Thermal</b>		
Temperature Resistance		
Recommended Constant Use, max		158°F (70°C)
Recommended Intermittent Use, max		250°F (121°C)
Thermal Conductivity, BTU-in/hr-sq ft°F (W/m-C)	ASTM E1530	0.6 (0.086)
<b>Environmental</b>		
Fogging	SAE-J 1756, 3 hrs. @ 212°F (100°C)	-
Outgassing		
TML %	ASTM E595, 24 hr. @ 257	2.22
CVCM %		.030
WVR %		.160
Water Absorption, % wt. gain	AMS 3568-95	13
UL Testing (JMST2)	UL 50 and UL 508	File MH26338
<b>Electrical</b>		
Surface Resistivity, ohm/sq	ASTM D257	1 X 10 <sup>14</sup>
Volume Resistivity, ohm.cm	ASTM D257	2.9 X 10 <sup>11</sup>
Dielectric Strength, volts/mil	ASTM D149	53



### PERFORMANCE PLASTICS

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**Please Note:** Because Saint-Gobain Performance Plastics cannot anticipate or control every potential application, we strongly recommend testing of this product under actual application conditions prior to commercial use.

Korel® is a registered trademark.

**Limited Warranty:** For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s). SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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