

Korel® K20 - Thin/Very Soft Series



KOREL® - Thin / Very Soft

KOREL® K20 series micro-cellular urethane foams include thin gauge formulations. The products are available from 0.5 to 1.0mm. These very soft conformable foams maintain excellent compression set resistance even under elevated temperatures. The more conformable foam allows for improved sealability on parts with variable dimensions and will absorb thermal expansion / contraction movement. These products are offered on PET liner for stability and aid in die-cutting.

Saint-Gobain Performance Plastics flexible manufacturing allows KOREL® to be offered with a number of options:

- Polyester: 0.05mm thick polyester (PET) film is available as a permanent integral part of the foam. The polyester allows for ease in handling and elimination of stretch (standard).
- Paper: White, coated two sides for easy release (optional for all).
- Non-standard products (optional - liners or colour) can be produced by special order. Minimum and extended lead times may apply.

Thin gauge, very soft, low deflection, conformable micro-cellular urethane foam with excellent compression set resistance.

Features & Benefits

- Reduce force to compress - easier to assemble parts, and less stress on components
- Conformable foam - maintains a seal on parts with variable dimensions, and absorbs expansion contraction movement
- Excellent compression set resistance
- Resistant to moisture and most chemicals
- Available cast onto polyester film for stability

Applications

- LCD gaskets
- Casing / Housing seals
- Speaker and sound management gaskets

KOREL® K20 - Thin / Very Soft

Properties	Test Method	KOREL K20		
Physical				
Density (kg/m ³)	ASTM D3574	400	440	480
Thickness (mm)		1.0	0.8 - 0.7	0.5
Colour		Black	Black	Black
Compression set (%) 50% @ 23°C 50% @ 70°C	ASTM D3574 Test D	2 10	2 10	2 10
Compression force deflection (kPa) 12.7mm/min @ 25% - 1 min.dwell	ASTM D3574 Test C	14	17	21
Force to compress (kPa) 12.7mm/min @ 25% - instantaneous	ASTM D3574 Test C	17	23	28
Thermal				
Recommended constant use, max. (°C)		70	70	70
Recommended intermittent, max. (°C)		121	121	121
Storage temperature	100°C for 1000 hrs.	OK	OK	OK
Thermal conductivity (W/m-C)	ASTM E1530	0.086	0.086	0.086
Environmental				
Fogging	SAE-J 1756 3 hrs @ 100°C	OK	OK	OK
Outgassing	ASTM E1530 25 hrs @ 110°C	1.06	1.06	1.06
	TML %	0.25	0.25	0.25
	CVCM %	0.14	0.14	0.14
	WVR %			
Electrical				
Surface resistivity, ohm/sq	ASTM D257	3 × 10 ¹⁵	4 × 10 ¹⁵	5 × 10 ¹⁵
Volume resistivity, ohm/sq	ASTM D257	4 × 10 ¹⁴	5 × 10 ¹⁴	6 × 10 ¹⁴
Dielectric strength, volts/mil	ASTM D149	47	47	47

Distributor:

Saint-Gobain Performance Plastics

Avenue du Parc 18
4650 Chaineux (Belgium)
Phone: +32/87 32 20 11
Fax: +32/87 32 20 51
sgpl.chaineux@saint-gobain.com



KOREL® is a registered trademark.

The data and details in this leaflet were correct and up-to-date at the time of printing and are intended to provide information on our products and their possible applications. It is the user's responsibility to make sure he is in possession of the latest version of the product data sheet. This leaflet is not a specification and does not assure specific product characteristics or make reference to the suitability of the products for a definite application. Because Saint-Gobain cannot anticipate or control every application, we strongly recommend testing of this product under individual application conditions.