

## Saint-Gobain Korel® K20 Very Soft 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 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.**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 deformation**Typical Applications:** Cellular telephones, electrical enclosures, electronic gasketing, vibration damping, cushioning, acoustical control, bumpers, instrument panels, spacers.**Specification Notes:** UL Testing (JMST2) UL 50 and UL 508 File MH26338. All data based on a 0.14 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-K20-Very-Soft-Micro-cellular-Polyurethane-Foam.php](http://www.lookpolymers.com/polymer_Saint-Gobain-Korel-K20-Very-Soft-Micro-cellular-Polyurethane-Foam.php)

| Physical Properties | Metric     | English                   | Comments                |
|---------------------|------------|---------------------------|-------------------------|
| Density             | 0.332 g/cc | 0.0120 lb/in <sup>3</sup> | ASTM D1667              |
| Water Absorption    | 13 %       | 13 %                      | % by weight; ASTM D3574 |

| Mechanical Properties   | Metric                       | English     | Comments  |
|-------------------------|------------------------------|-------------|---|
| Hardness, Shore O       | 7.0                          | 7.0         | ASTM D2240  |
| Tensile Strength, Yield | 0.241 MPa                    | 35.0 psi    | ASTM D3574  |
| Elongation at Break     | 250 %                        | 250 %       | ASTM D3574  |
| Tensile Modulus         | 0.000138 GPa                 | 0.0200 ksi  | ASTM D3574  |
| Compressive Strength    | 0.0207 MPa                   | 3.00 psi    | Compression Deflection, Value given for 12.7 mm/min, 25% deflection.; ASTM D3574 Test C |
| Compressive Modulus     | 0.0000276 GPa                | 0.00400 ksi | Force to Compress, Value given for 25% compression; ASTM D1667                          |
| Tear Strength           | 1.93 kN/m                    | 11.0 pli    | Initial Tear Strength; ASTM D624 Die C  |
| Compression Set         | <= 2.0 %                     | <= 2.0 %    | Constant Deflection at 73°F; ASTM D 3574 Test D   |
|                         | <= 10 %<br>@Temperature 70.0 | <= 10 %     | Constant Deflection; ASTM D 3574 Test D   |

| Mechanical Properties | Metric | English | Comments |
|-----------------------|--------|---------|----------|
|-----------------------|--------|---------|----------|

| Thermal Properties               | Metric       | English                                 | Comments     |
|----------------------------------|--------------|---|--------------|
| Thermal Conductivity             | 0.0865 W/m-K | 0.600 BTU-in/hr-ft <sup>2</sup> -<br>°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             | 2.90e+11 ohm-cm | 2.90e+11 ohm-cm |           |
| Surface Resistivity per Square | 1.00e+14 ohm    | 1.00e+14 ohm    |           |
| Dielectric Strength            | 2.09 kV/mm      | 53.0 kV/in      | ASTM D149 |

| Descriptive Properties | Value | Comments |
|------------------------|-------|----------|
| Standard Color         | Black |          |

## Contact Songhan Plastic Technology Co.,Ltd.

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