



TBP Converting, Inc.  
Saint Gobain K10/K20/K30 PDS

# K10/K20/K30 THIN SUPPORTED

## Engineered for High Performance Gasketing Applications

Gasketing – **Norseal**® PUR 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 **Norseal** PUR 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.

## Norseal K Series Micro-cellular Polyurethane Foam

The **Norseal** 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. Ideal for seals around LCD and hand held devices.

**Norseal** micro-cellular foams are categorized by degree of deflection force. By varying the modulus and density, **Saint-Gobain**® has developed this series of materials that meets the demands of design engineers today.

**K10-SS** is super low deflection force foam in non-support configuration. This unique concept allows for additional compression covering a wider compression range. The foam also exhibits a high surface energy. This enhance the sealability with a self-stick feature. Making the product idea for LCD gasket application in hand-held devices.

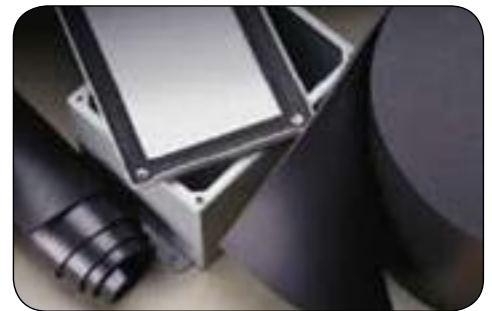
**K10-MD** is low deflection force foam processed on PET film, ideal for seals and gasket that need high compression rate and low deflection force. The foam is available with a dry surface for ease in processing and assembly.

**K20-MD** is middle deflection force foam processed on PET film, idea for seals and gasket that need high compression rate and medium deflection force. The foam is available with a dry surface for ease in processing and assembly.

**K30-MD** is high deflection grade with very thin thickness. Provide certain level deflection to the assembly. Processed on PET liner with good dimension stability. Ideal for seals and gasket that need high deflection and thin gauge.

## 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



## APPLICATIONS

- Cellular telephones
- Electrical enclosures
- Electronic gasketing
- Vibration damping
- Cushioning
- Acoustical control
- Bumpers
- Instrument panels
- Spacers

**Norseal K10/K20/K30 – Typical Properties**

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

| Physical   | Test Method                | K10-SS               | K10-MD*     | K20-MD*     | K30-MD*             |
|--|----------------------------|----------------------|-------------|-------------|---------------------|
| Density<br>lb./cu. ft.<br>(kg/m <sup>3</sup> )           | ASTM<br>D3574              | 14<br>(235)          | 14<br>(235) | 21<br>(340) | 46 (750)<br>(0.3mm) |
| CFD, psi (kPa)<br>12.7mm/min<br>@ 25% Deflection         | GB/T 20467<br>-2006        | 1.6<br>(11)          | 2.0<br>(14) | 5.8<br>(40) | 90<br>(622)         |
| FTC psi (kPa)<br>@ 25% Deflection                        | GB/T 20467<br>-2006        | 2.1<br>(15)          | 2.7<br>(19) | 9.3<br>(64) | 117<br>(806)        |
| Compression Set %<br>@ 73°F (23°C)<br>@ 158°F (70°C)     | ASTM<br>D3574<br>Test D    | < 3<br>< 5           |             |             |                     |
| Constant Use, Max  |                            | 158°F (70°C)         |             |             |                     |
| Intermittent Use,<br>Max                                 |                            | 250°F (121°C)        |             |             |                     |
| Thermal<br>Conductivity<br>BTU- in/hr-sqft°F<br>(W/m- C) | ASTM<br>E1530              | 0.6 (0.086)          |             |             |                     |
| Surface Resistivity<br>ohm/sq                            | ASTM<br>D257               | 3 × 10 <sup>15</sup> |             |             |                     |
| Volume Resistivity<br>ohm.cm                             | ASTM<br>D257               | 4 × 10 <sup>14</sup> |             |             |                     |
| Dielectric Ste<br>volts/mil                              | ASTM D149                  | 47                   |             |             |                     |
| Fogging  | SAE-J 1756<br>3 hrs@100 °C | Pass                 |             |             |                     |

**Norseal K10/K20/K30 – Standard Roll Size**

| Item      | Color | T<br>(mm) | W<br>(mm) | L<br>(m) |
|-----------|-------|-----------|-----------|----------|
| K10-0.5mm | Black | 0.5       | 680       | 100      |
| K10-0.8mm |       | 0.8       | 680       | 50       |
| K10-1.0mm |       | 1.0       | 680       | 50       |
| K10-1.3mm |       | 1.3       | 680       | 50       |
| K10-1.5mm |       | 1.5       | 680       | 50       |
| K20-0.4mm |       | 0.4       | 508       | 100      |
| K20-0.5mm |       | 0.5       | 508       | 100      |
| K20-0.7mm |       | 0.7       | 508       | 50       |
| K20-0.8mm |       | 0.8       | 508       | 50       |
| K20-1.0mm |       | 1.0       | 508       | 50       |
| K20-1.3mm |       | 1.3       | 508       | 50       |
| K20-1.5mm |       | 1.5       | 508       | 50       |
| K20-2.0mm |       | 2.0       | 508       | 40       |
| K30-0.2mm |       | 0.2       | 680       | 100      |
| K30-0.3mm |       | 0.3       | 508       | 100      |

\* FTC and CFD is tested with supported PET.

Above are standard items, specific need has MOQ.

**Important Instructions**

Because **Saint-Gobain** cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use.

Parameter values are not guaranteed and will differ from lot to lot. For specification writing, please contact local **Saint-Gobain** Technical Service Department.

**Shelf Life**

12 months after the date of sale when stored in original packaging at temperatures up to 70°F (21°C) and 50% relative humidity.



**IMPORTANT:** It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Plastics products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain assumes no responsibility for any product failures that occur due to misuse of the materials it provides arising out of the design, fabrication or application of the products into which the materials are incorporated.

**WARRANTY:** For a period of 6 months, Saint-Gobain warrants this product(s) to be free from defects in manufacturing. The only obligation under any applicable product warranty will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. SAINT-GOBAIN DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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