



STK50B

Elastocon® STK50B black thermoplastic elastomer has been developed for applications that require ultra soft rubber-like properties and a good surface finish. Elastocon® STK50B is well suited for consumer goods and industrial applications requiring non-slip/soft touch ergonomics, sound and vibration dampening, improved impact resistance, and U.V. stability. Elastocon® STK50B can be overmolded to PC, ABS, PC/ABS, Acrylic, and PS.

Elastocon® STK50B is supplied as ready to use pellets in 50 lb. bag quantities.

| Typical Physical Properties | | | |
|-----------------------------|-----------------------------|-----------|---------------|
| Property | Referenced ASTM Test Method | Test Unit | Typical Value |
| Hardness | ASTM D2240 | Shore A | 55 |
| Specific Gravity | ASTM D792 | g/cc | .92 |
| Tensile Properties | ASTM D412 | | |
| Tensile Strength | ASTM D412 | MPa (psi) | 5.4 (787) |
| 100% Modulus | ASTM D412 | MPa (psi) | 1.6 (237) |
| Elongation | ASTM D412 | % | 537 |
| Tear Strength | ASTM D624 | pli | 110 |

For additional technical, sales, and order assistance:

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Design & Processing

Elastocon® thermoplastic elastomers are shear dependent and have been formulated to process on conventional thermoplastic equipment for injection molding, extrusion or blow molding. Our tests have shown that overmolding onto a non-gloss, matte surface finish will help optimize overmold adhesion to the substrate. Be sure to incorporate mechanical interlocks and 1:1 through holes whenever possible when designing two shot components. Feathered edges should always be avoided to ensure adequate and consistent shut off against the substrate, while also eliminating exposed tapered edges that can be subject to adhesive failure.

| Suggested Processing Conditions | | |
|--|----------------|---------------|
| Barrel Temperatures | English | SI |
| Rear | 410-420F | 210-216C |
| Front | 420-510F | 216-266C |
| Nozzle | 440-530F | 227-277C |
| | | |
| Mold Temperature | 80F-120F | 27-49C |
| | | |
| Back Pressure | 75-175 psi | .52-1.21 MPa |
| | | |
| Injection Rate | 1-5 in/sec | 25-127 mm/sec |

Elastocon STK50B thermoplastic elastomer compound does not require drying.

Elastocon® thermoplastic elastomers are not compatible with flexible PVC and should not be blended with or used in an application where direct contact is intended.

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