

AuroraFlex™ STK50

Aurora Material Solutions, LLC - *Thermoplastic Elastomer*

General Information

Product Description

STK50 thermoplastic elastomer has been developed for applications that require ultra soft rubber-like properties and a good surface finish. STK50 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. STK50 can be overmolded to PC, ABS, PC/ABS, Acrylic, and PS.

General

| | | | |
|-------------------|---|-----------------------------|--|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Good Impact Resistance • Good Surface Finish | • Soft • Sound Damping | • UV Stabilized • Vibration Damping |
| Uses | • Consumer Applications | • Industrial Applications | • Overmolding |
| Appearance | • Colors Available | | |
| Processing Method | • Injection Molding | | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--------------------------------------|---------------|--------|-------------|
| Density / Specific Gravity | 0.902 | | ASTM D792 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Stress (100% Strain) | 203 | psi | ASTM D412 |
| Tensile Strength | 653 | psi | ASTM D412 |
| Tensile Elongation (Break) | 540 | % | ASTM D412 |
| Tear Strength | 105 | lbf/in | ASTM D624 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness (Shore A, 10 sec) | 45 | | ASTM D2240 |

Processing Information

| Injection | Nominal Value | Unit |
|--------------------|---------------|------|
| Rear Temperature | 410 to 421 | °F |
| Front Temperature | 421 to 511 | °F |
| Nozzle Temperature | 441 to 531 | °F |
| Mold Temperature | 81 to 120 | °F |
| Back Pressure | 75.4 to 175 | psi |

