

Monprene® CP-11180

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene CP-11100 High Density Series of thermoplastic elastomer compounds, available in NAT or colors, from 40 to 90 Shore A, are designed specifically for consumer product applications requiring a soft, rubber-like feel. Monprene CP-11180 is a medium hardness, high density, filled grade that is suitable for injection molding.

| Material Status | Commercial: Active | | |
|-------------------|--|---|--|
| Availability | Africa & Middle East Asia Pacific | Europe Latin America | North America |
| Features | Chemical ResistantFilledGeneral PurposeGood Adhesion | Good ColorabilityGood FlexibilityGood ProcessabilityHigh Density | High Specific GravityMedium Hardness |
| Uses | Appliances Consumer Applications Flexible Grips Furniture Handles Household Goods | Knobs Personal Care Rubber Replacement Safety Equipment Soft Touch Applications Sporting Goods | Stationary Supplies Toys Water Sports Equipment Writing Instruments |
| RoHS Compliance | RoHS Compliant | | |
| Appearance | Colors Available | • Opaque | |
| Forms | Pellets | | |
| Processing Method | Injection Molding | | |

| ASTM & ISO Properties ¹ | | | | |
|---|---------------|--------|-------------|--|
| Physical | Nominal Value | Unit | Test Method | |
| Density / Specific Gravity | 1.14 | | ISO 1183 | |
| Elastomers | Nominal Value | Unit | Test Method | |
| Tensile Stress - Across Flow (100% Strain) | 450 | psi | ISO 37 | |
| Tensile Stress - Across Flow (Break) | 1710 | psi | ISO 37 | |
| Tensile Elongation - Across Flow (Break) | 790 | % | ISO 37 | |
| Tear Strength ² | | | ISO 34-1 | |
| Across Flow | 228 | lbf/in | | |
| Flow | 223 | lbf/in | | |
| Compression Set ³ (158°F, 22 hr) | 49 | % | ISO 815 | |
| Hardness | Nominal Value | Unit | Test Method | |
| Shore Hardness (Shore A, 5 sec) | 80 | | ISO 868 | |
| Additional Information | Nominal Value | Unit | Test Method | |
| Apparent Shear Viscosity - Capillary, @ 206/s (392°F) | 218 | Pa∙s | ASTM D3835 | |



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| Processing Information | | | |
|------------------------|--------------------|--|--|
| Injection | Nominal Value Unit | | |
| Rear Temperature | 320 to 350 °F | | |
| Middle Temperature | 360 to 400 °F | | |
| Front Temperature | 380 to 420 °F | | |
| Nozzle Temperature | 360 to 440 °F | | |
| Processing (Melt) Temp | 360 to 440 °F | | |
| Mold Temperature | 80 to 120 °F | | |
| Injection Rate | Moderate-Fast | | |
| Back Pressure | 25.0 to 100 psi | | |
| Screw Speed | 50 to 100 rpm | | |
| Cushion | 0.150 to 0.500 in | | |

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

Notes

¹ Typical properties: these are not to be construed as specifications.

² Method Ba, Angle (Unnicked)

³ Type A