

Monprene® CP-17270

Teknor Apex Company - Thermoplastic Elastomer

Thursday, March 28, 2024

General Information

Product Description

The Monprene CP-17200 Filled, High Flow Series of thermoplastic elastomer compounds, with good UV resistance, available in NAT or colors, from 40 to 80 Shore A, are designed specifically for EU consumer product applications requiring a soft, rubber-like feel. Monprene CP-17270 is a medium hardness, medium density grade that is suitable for injection molding and extrusion.

General

| | | | |
|-------------------|--|---|--|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Chemical Resistant • Filled • Good Adhesion • Good Colorability | • Good Flexibility • Good Flow • Good Moldability • Lubricated | • Medium Density • Medium Hardness • UV Resistant |
| Uses | • Bushings • Consumer Applications • Flexible Grips • Gaskets | • Grommets • Handles • Luggage • Overmolding | • Plugs • Rubber Replacement • Soft Touch Applications |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Colors Available | • Opaque | |
| Forms | • Pellets | | |
| Processing Method | • Extrusion | • Injection Molding | |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-------------------|-------------|
| Density / Specific Gravity | 1.04 | g/cm ³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 30 | g/10 min | ASTM D1238 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Stress (100% Strain) | 1.90 | MPa | ASTM D412 |
| Tensile Stress (300% Strain) | 2.60 | MPa | ASTM D412 |
| Tensile Strength (Break) | 7.60 | MPa | ASTM D412 |
| Tensile Elongation (Break) | 800 | % | ASTM D412 |
| Compression Set | | | ASTM D395 |
| 23°C, 22 hr | 31 | % | |
| 70°C, 22 hr | 55 | % | |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness | | | ASTM D2240 |
| Shore A, 1 sec | 72 | | |
| Shore A, 5 sec | 70 | | |
| Fill Analysis | Nominal Value | Unit | Test Method |
| Apparent Viscosity (200°C, 206 sec ⁻¹) | 107 | Pa·s | ASTM D3835 |

Legal Statement

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchaser assumes all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

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| Processing Information | | |
|------------------------|----------------|------|
| Injection | Nominal Value | Unit |
| Rear Temperature | 182 to 232 | °C |
| Middle Temperature | 188 to 238 | °C |
| Front Temperature | 193 to 243 | °C |
| Nozzle Temperature | 199 to 249 | °C |
| Processing (Melt) Temp | 199 to 249 | °C |
| Mold Temperature | 35 to 49 | °C |
| Injection Pressure | 1.38 to 5.52 | MPa |
| Injection Rate | Fast | |
| Back Pressure | 0.172 to 0.689 | MPa |
| Screw Speed | 50 to 100 | rpm |
| Cushion | 3.81 to 25.4 | mm |

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).

| Extrusion | Nominal Value | Unit |
|-----------------------|---------------|------|
| Cylinder Zone 1 Temp. | 182 to 232 | °C |
| Cylinder Zone 2 Temp. | 188 to 238 | °C |
| Cylinder Zone 3 Temp. | 193 to 243 | °C |
| Cylinder Zone 4 Temp. | 199 to 249 | °C |
| Cylinder Zone 5 Temp. | 199 to 249 | °C |
| Die Temperature | 199 to 249 | °C |

Extrusion Notes
Screw Speed: 30 to 100 rpm

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

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|--|---|---|--|
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