



Monprene® RG-18108 NAT (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene RG-18108 is a high performance thermoplastic elastomer, available in NAT and colors, intended for use in food contact applications. Monprene RG-18108 is a very soft, low density grade with good adhesion to PP and complies with various US FDA regulations and EU directives for food contact. This grade is suitable for injection molding. Please contact Teknor Apex for a regulatory compliance letter.

General

| | | | |
|-------------------|---|--|---|
| Material Status | • Preliminary Data | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Bondability • Chemical Resistant • Good Adhesion • Good Colorability | • Good Moldability • Good Processability • Halogen Free • High Elasticity | • Low Density • Low Hardness • Low Specific Gravity • Lubricated |
| Uses | • Flexible Grips • Non-specific Food Applications | • Overmolding • Rubber Replacement | • Seals • Soft Touch Applications |
| Agency Ratings | • EU Food Contact | • FDA | |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Clear/Transparent | • Colors Available | • Natural Color |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|----------|-------------|
| Density / Specific Gravity | 0.872 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (150°C/2.16 kg) | 1.5 | g/10 min | ASTM D1238 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 160 | psi | ASTM D412 |
| Tensile Elongation ² (Break) | 800 | % | ASTM D412 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness | | | ASTM D2240 |
| Shore A, 1 sec, Injection Molded | 11 | | |
| Shore A, 5 sec, Injection Molded | 8 | | |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Rear Temperature | 300 to 340 | °F |
| Middle Temperature | 340 to 380 | °F |
| Front Temperature | 380 to 440 | °F |
| Nozzle Temperature | 380 to 440 | °F |
| Processing (Melt) Temp | 380 to 440 | °F |

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| Injection | Nominal Value | Unit |
|--------------------|---------------|------|
| Mold Temperature | 70 to 125 | °F |
| Injection Pressure | 50.0 to 150 | psi |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 50 to 100 | rpm |
| Cushion | 0.140 to 1.00 | 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 Die C, 20 in/min