



Monprene® RG-18280 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Monprene RG-18200 series is a group of unfilled high performance thermoplastic elastomers with high flow specifically designed for EU injection molded regulated applications including food contact, toys, and children's products. Monprene RG-18280 is a low density, medium hardness grade that complies with various US FDA and European regulations and directives for food contact and toy safety and is suitable for injection molding. Please contact Teknor Apex for a regulatory compliance letter.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Europe	• Latin America • North America	
Features	• Food Contact Acceptable • Good Adhesion • Good Colorability	• Good Processability • Low Density • Low Specific Gravity	• Lubricated • Medium Hardness • Without Fillers
Uses	• Closures • Consumer Applications • Cosmetic Packaging • Food Containers • Food Packaging	• Food Service Applications • Gaskets • Handles • Kitchenware • Lids	• Non-specific Food Applications • Rubber Replacement • Toothbrush Handles • Toys
Agency Ratings	• EU Food Contact	• FDA Food Contact	
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Translucent	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.890	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	558	psi	ISO 37
Tensile Stress (300% Strain)	695	psi	ISO 37
Tensile Strength (Break)	996	psi	ISO 37
Tensile Elongation (Break)	550	%	ISO 37
Compression Set			ISO 815
73°F, 22 hr	41	%	
158°F, 22 hr	62	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	80		ISO 868
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	103	Pa·s	ISO 11443

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Injection	Nominal Value	Unit
Rear Temperature	248 to 320	°F
Middle Temperature	320 to 446	°F
Front Temperature	356 to 446	°F
Nozzle Temperature	356 to 446	°F
Processing (Melt) Temp	356 to 446	°F
Mold Temperature	59 to 122	°F
Injection Rate	Fast	
Back Pressure	72.5 to 218	psi
Screw Speed	50 to 100	rpm
Cushion	0.118 to 0.787	in

Injection Notes

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

Notes

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