

TECHNICAL DATA SHEET

Monprene® RG-10180

Teknor Apex Co.

TPE

Processing

Injection molding

Delivery Form

Pellets

Additives

Lubricants

Special Characteristics

Translucent

Features

Good adhesion

Certifications

Food contact, Food approval FDA 21 CFR

Applications

Packaging

Product Text

Product Information

Preliminary Data

The Monprene RG-10100 series is a group of high performance thermoplastic elastomers specifically designed for regulated applications including food contact, toys, and children's products. Monprene RG-10180 is a low density, higher 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.

Adheres to PP

Property	Value	Unit	Standard
Tensile Stress at 100% (across flow)	3.03	MPa	ISO 37
Tensile Stress at break (across flow)	15.3	MPa	ISO 37
Tensile Strain at Break (across flow)	830	%	ISO 37
Tear Strength (across flow)	39	kN/m	ISO 34-1
Apparent Viscosity (200 °C, 206 1/s)	269	Pas	ASTM D3835

Processing/Physical Characteristics	Value	Unit	Standard
Melt flow index, MFI	6.5	g/10min	ASTM D 1238
Temperature	200	°C	
Load	5	kg	

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Mechanical Properties	Value	Unit	Standard
Compression set at 70 °C, 24h	37	%	ISO 815
Tear strength, parallel	47	kN/m	ISO 34-1
Shore A hardness, 15s	80		ISO 7619-1

Other Properties	Value	Unit	Standard
Density	888	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	65	°C	
Pre-drying - time	2 - 4	h	
Melt temperature	182 - 227	°C	
Mold temperature	27 - 49	°C	
Zone 1	160 - 177	°C	
Zone 2	182 - 204	°C	
Zone 3	193 - 216	°C	
Nozzle temperature	182 - 227	°C	
Screw speed	50 - 100	rpm	
Back pressure	0.172 - 0.689	MPa	