

**Product Texts**

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	Test Standard
<b>ASTM Data</b>			
Melt Flow Index, MFI	6.5	g/10min	ASTM D 1238
Temperature	200	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Compression set at 70 °C, 24h	37	%	ISO 815
Tear strength	47	kN/m	ISO 34-1
Shore A hardness	80	-	ISO 7619-1

Other properties	Value	Unit	Test Standard
Density	888	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test 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	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Features**

Good Adhesion

**Certifications**

Food contact, Food approval FDA 21 CFR

## Monprene® RG-10180

TPE

Teknor Apex Co.

### Additives

Lubricants

### Applications

Packaging

### Special Characteristics

Translucent

### Regional Availability

North America, Europe, South and Central America, Near East/Africa