

**Sipolprene® 54205**

(TPC-ET)

Sipol spa Società Italiana Polimeri

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	<b>17</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>230</b>	°C	-
Load	<b>2.16</b>	kg	-
Melt flow index, MFI	<b>20</b>	g/10min	ISO 1133
Temperature	<b>230</b>	°C	-
Load	<b>2.16</b>	kg	-
Molding shrinkage, parallel	<b>1.1</b>	%	ISO 294-4, 2577
Molding shrinkage, normal	<b>1.7</b>	%	ISO 294-4, 2577

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Stress at break	<b>43</b>	MPa	ISO 527
Strain at break	<b>500</b>	%	ISO 527
Flexural modulus, 23°C	<b>200</b>	MPa	ISO 178
Izod notched impact strength, +23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	<b>N</b>	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	<b>-40</b>	°C	-
Compression set at 23 °C, 24h	<b>22</b>	%	ISO 815
Compression set at 70 °C, 24h	<b>60</b>	%	ISO 815
Abrasion resistance	<b>18</b>	mm <sup>3</sup>	ISO 4649
Shore D hardness	<b>54</b>	-	ISO 7619-1

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melting temperature, 10°C/min	<b>204</b>	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	<b>-14</b>	°C	ISO 11357-1/-2
Vicat softening temperature, A	<b>182</b>	°C	ISO 306

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Volume resistivity	<b>1E10</b>	Ohm*m	IEC 62631-3-1
Electric strength	<b>18</b>	kV/mm	IEC 60243-1

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1210</b>	kg/m <sup>3</sup>	ISO 1183

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>90</b>	°C	-
Pre-drying - Time	<b>2 - 3</b>	h	-
Processing humidity	<b>≤0.15</b>	%	-
Mold temperature	<b>30 - 40</b>	°C	-
Zone 1	<b>185 - 200</b>	°C	-
Zone 2	<b>210</b>	°C	-
Zone 3	<b>220</b>	°C	-
Nozzle temperature	<b>230</b>	°C	-

<b>Processing Recommendation Extrusion</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>90</b>	°C	-
Pre-drying - Time	<b>2 - 3</b>	h	-
Processing humidity	<b>≤0.15</b>	%	-
Feed temperature	<b>195 - 210</b>	°C	-
Zone 1	<b>205 - 215</b>	°C	-
Zone 2	<b>210 - 225</b>	°C	-
Nozzle temperature	<b>210 - 225</b>	°C	-

**Characteristics**

**Processing**

Injection Molding, Other Extrusion

**Delivery form**

Pellets

**Features**

Good Adhesion

**Certifications**

Food contact, Food approval 10/2011, Food approval FDA 21 CFR, RoHS compliant, REACH

**Regional Availability**

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