

# SKYPEL® G130D

## SK Chemicals - Thermoplastic Polyester Elastomer

### General Information

#### Product Description

SKYPEL G130D is a thermoplastic polyester elastomer resin exhibiting superior heat resistance with a relatively high melting point. SKYPEL G130D with a medium 30D hardness based on shore D scale is widely used for injection molding and extrusion applications.

#### OUTSTANDING CHARACTERISTICS AND PROPERTIES

SKYPEL G130D offers enhanced performance upon high thermal stability and flexural modulus. Outstanding characteristics of SKYPEL G130D are listed below.

1. Excellent mechanical properties such as high tensile strength and strain at break
2. High resistance to creep, impact, and flex-fatigue
3. Good thermal stability at high temperature
4. Excellent flexibility at low temperature
5. Good discoloration property at high temperature

#### APPLICATION

SKYPEL G130D is suitable for general compounding and producing special products such as automotive parts, cable jackets, hoses, tubes, films, and sheets.

#### PROCESSING

SKYPEL G130D should be sufficiently dried prior to processing. For effective drying using dehumidifying dryer, it should be held for 2 to 3 hours at 100 °C or overnight at least 70 °C. Pre-dried SKYPEL G130D in aluminum bag is also available for your convenience upon your choice. Injection molding and extrusion conditions are summarized in Table 2.

#### General

Features	<ul style="list-style-type: none"> <li>• Creep Resistant</li> <li>• Fatigue Resistant</li> <li>• Good Heat Resistance</li> </ul>	<ul style="list-style-type: none"> <li>• Good Thermal Stability</li> <li>• High Impact Resistance</li> <li>• High Tensile Strength</li> </ul>	<ul style="list-style-type: none"> <li>• Low Temperature Flexibility</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Automotive Applications</li> <li>• Cable Jacketing</li> <li>• Compounding</li> </ul>	<ul style="list-style-type: none"> <li>• Film</li> <li>• Hose</li> <li>• Sheet</li> </ul>	<ul style="list-style-type: none"> <li>• Tubing</li> </ul>
Forms	<ul style="list-style-type: none"> <li>• Pellets</li> </ul>		
Processing Method	<ul style="list-style-type: none"> <li>• Extrusion</li> </ul>	<ul style="list-style-type: none"> <li>• Injection Molding</li> </ul>	

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.07		ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/2.16 kg)	17	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>2</sup>			ASTM D638
5.0% Strain, 0.0787 in, Injection Molded	85.3	psi	
10% Strain, 0.0787 in, Injection Molded	256	psi	
Tensile Strength <sup>2</sup> (Break, 0.0787 in, Injection Molded)	3130	psi	ASTM D638

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<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Elongation <sup>2</sup>			ASTM D638
Break, 0.0787 in, Injection Molded	900	%	
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Durometer Hardness (Shore D)	30		ASTM D2240
Shore Hardness			ISO 868
--	< 32		
15 sec	27		
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Peak Crystallization Temperature (DSC) <sup>3</sup>	345	°F	ASTM D3418

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	212	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	356 to 365	°F
Middle Temperature	374 to 383	°F
Front Temperature	374 to 383	°F
Nozzle Temperature	383 to 392	°F
Mold Temperature	77	°F
<b>Extrusion</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	212	°F
Drying Time	2.0 to 3.0	hr
Cylinder Zone 1 Temp.	338 to 347	°F
Cylinder Zone 3 Temp.	356 to 365	°F
Cylinder Zone 5 Temp.	365 to 374	°F
Melt Temperature	374 to 383	°F
Die Temperature	365 to 374	°F

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Type IV, 2.0 in/min

<sup>3</sup> Heating rate 10°C/min.