

## **SKYPEL G240D**

### **DESCRIPTION**

SKYPEL G240D is a thermoplastic polyester elastomer resin exhibiting superior heat resistance with a relatively high melting point. SKYPEL G240D with a medium 40D hardness based on shore D scale is widely used for injection molding and extrusion applications.

### **OUTSTANDING CHARACTERISTICS AND PROPERTIES**

SKYPEL G240D offers enhanced performance upon high thermal stability and flexural modulus. Outstanding characteristics of SKYPEL G240D 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 G240D is suitable for general compounding and producing special products such as automotive parts, cable jackets, hoses, tubes, films, and sheets.

### **PROCESSING**

SKYPEL G240D 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 G240D in aluminum bag is also available for your convenience upon your choice. Injection molding and extrusion conditions are summarized in Table 2.

**Table 1. PROPERTIES OF SKYPEL G240D**

Properties	ASTM No	Units	G240D
Forms			<b>Pellet</b>
Specific Gravity	D792		<b>1.10</b>
Hardness	D2240	Shore D	<b>40</b>
Hardness, max	(ISO868)		<b>37</b>
Hardness, 15s	(ISO868)		<b>33</b>
Tensile Strength at Break <sup>1)</sup>	D638	MPa	<b>25</b>
@ 5% Strain			<b>2.2</b>
@ 10% Strain			<b>3.4</b>
Elongation at Break <sup>1)</sup>	D638	%	<b>670</b>
Melting Point <sup>2)</sup>	D3418	°C	<b>191</b>
Melt Flow Rate (220 °C, 2.16 kg)	D1238	g/10min	<b>8</b>

The evaluated results are for this trial products only. All data and specifications can be modified or changed in the future.

1) ASTM Type IV dumbbells diecut from injection molded slab 2 mm thick. Crosshead speed 50 mm/min.

2) Differential Scanning Calorimeter (DSC), peak of endotherm. Heating rate 10 °C/min.

**Table 2. PROCESSING CONDITIONS OF SKYPEL G240D**

INJECTION	Cylinder			Nozzle	Mold
	Rear	Center	Front		
	<b>205-210 °C</b>	<b>210-215 °C</b>	<b>210-215 °C</b>	<b>215-220 °C</b>	<b>35 °C</b>
EXTRUSIION	Cylinder			Die	Melt
	Rear	Center	Front		
	<b>190-195 °C</b>	<b>205-210 °C</b>	<b>210-215 °C</b>	<b>210-215 °C</b>	<b>215-220 °C</b>