

DEXFLEX® 727

Thermoplastic Polyolefin Elastomer

LyondellBasell Advanced Polyolefins USA, Inc.

Product Description

Dexflex 727 is a thermoplastic olefinic elastomer (TPO) designed for automotive exterior applications that require a combination of stiffness, good low-temperature impact resistance, and excellent processability.

General

Features	• Good Processability • Good Stiffness	• Good Weather Resistance • Low Temperature Impact Resistance	• Paintable
Uses	• Automotive Applications	• Automotive Exterior Parts	
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Density	0.970	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	14	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress ² (Yield, 4.00 mm)	19.0	MPa	ISO 527-2/50
Flexural Modulus ^{3, 4} (4.00 mm)	1320	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Instrumented Dart Impact ⁵ (23°C)	18.0	J	ASTM D3763

Injection	Nominal Value	Unit
Rear Temperature	193 to 227	°C
Middle Temperature	193 to 227	°C
Front Temperature	193 to 227	°C
Nozzle Temperature	193 to 227	°C
Processing (Melt) Temp	210 to 232	°C
Mold Temperature	18.3 to 48.9	°C
Injection Pressure	3.45 to 10.3	MPa
Injection Rate	Moderate	
Back Pressure	0.345 to 2.07	MPa
Screw Speed	50 to 100	rpm
Clamp Tonnage	2.8 to 4.1	kN/cm ²
Cushion	6.35 to 12.7	mm

Notes

¹ Typical properties: these are not to be construed as specifications.

² 150x10x4 mm specimen

³ 2.0 mm/min

⁴ 80x10x4 mm specimen

⁵ 2.20 m/sec