ExxonMobil

Santoprene™ 121-80W175

Thermoplastic Vulcanizate

Product Description

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance, and is designed for thin wall or complex profile extrusion applications. This grade of Santoprene™ TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion, thermoforming or vacuum forming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Recommended for applications requiring excellent flex fatigue resistance.
- Recommended for applications requiring excellent ozone resistance.
- Designed for improved UV resistance.
- Designed for extruding thin wall sections with excellent definition (down to 0.33 mm [0.013"] radius) and to maximize run length with minimal build-up of material on screen packs or narrow sections of dies.

General

Applications	▪ Automotive - Seals and Gaskets	▪ Automotive - Weather Seals	
Uses	▪ Automotive Applications	▪ Automotive Exterior Trim	▪ Outdoor Applications
RoHS Compliance	▪ RoHS Compliant		
Color	▪ Black		
Form(s)	▪ Pellets		
Processing Method	▪ Coextrusion ▪ Extrusion	▪ Profile Extrusion ▪ Sheet Extrusion	▪ Thermoforming ▪ Vacuum Forming

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.955		0.955		ASTM D792
Density	0.966	g/cm³	0.966	g/cm³	ISO 1183

Hardness	Typical Value (English)		Typical Value (SI)		Test Based On
Shore Hardness					ISO 868
Shore A, 15 sec, 73°F (23°C)	85		85		

Elastomers	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Stress at 100% - Across Flow (73°F (23°C))	643	psi	4.43	MPa	ASTM D412
Tensile Stress at 100% - Across Flow (73°F (23°C))	643	psi	4.43	MPa	ISO 37
Tensile Strength at Break - Across Flow (73°F (23°C))	1320	psi	9.13	MPa	ASTM D412
Tensile Stress at Break - Across Flow (73°F (23°C))	1320	psi	9.13	MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	470	%	470	%	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	470	%	470	%	ISO 37