ExxonMobil

Santoprene™ 9101-80E

Thermoplastic Vulcanizate

Product Description

A black thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is designed for coextrusion applications, particularly for the static foot of automotive weatherseal systems like glass run channels. This grade of Santoprene TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion or thermoforming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Recommended for coextruded applications not exposed to UV light.
- Recommended for applications requiring excellent ozone resistance.
- Designed 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
RoHS Compliance	▪ RoHS Compliant	
Color	▪ Black	
Form(s)	▪ Pellets	
Processing Method	▪ Coextrusion	▪ Thermoforming

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.970		0.970		ASTM D792
Density	0.970	g/cm³	0.970	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)	80		80		

Elastomers	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Stress at 100% - Across Flow (73°F (23°C))	493	psi	3.40	MPa	ASTM D412
Tensile Stress at 100% - Across Flow (73°F (23°C))	493	psi	3.40	MPa	ISO 37
Tensile Strength at Break - Across Flow (73°F (23°C))	1020	psi	7.00	MPa	ASTM D412
Tensile Stress at Break - Across Flow (73°F (23°C))	1020	psi	7.00	MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	670	%	670	%	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	670	%	670	%	ISO 37
Compression Set					ASTM D395B
158°F (70°C), 22 hr, Type 1	48	%	48	%	
Compression Set					ISO 815
158°F (70°C), 22 hr, Type A	48	%	48	%	

Extrusion	Typical Value (English)		Typical Value (SI)	
Drying Temperature	180	°F	82	°C
Drying Time	3.0	hr	3.0	hr
Melt Temperature	350 to 400	°F	177 to 204	°C
Die Temperature	400	°F	204	°C
Back Pressure	725 to 2900	psi	5.00 to 20.0	MPa