EZPRENE® 9070A

Wednesday, November 6, 2019

ENPLAST Americas, a Ravago Group Company - Thermoplastic Vulcanizate

General Information

Product Description

65 Shore A TPE (Thermoplastic Vulcanizate). Available in black, natural or pre-colored for injection molding and extrusion applications. This material is non-hygroscopic and offers excellent chemical resistance and physical properties. EZPrene is polyolefin based and is 100% recyclable.

General			
Material Status	• Commercial: Active		
Availability	• North America		
Features	• Chemical Resistant • Good Adhesion • Good Colorability	• Low Die Swell • Low to No Water Absorption • Ozone Resistant	• Recyclable Material • UV Resistant
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.932		ASTM D792
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (100% Strain)	406	psi	ASTM D412
Tensile Strength (Break)	885	psi	ASTM D412
Tensile Elongation (Break)	560	%	ASTM D412
Tear Strength	177	lbf/in	ASTM D624
Compression Set			ASTM D395
73°F, 22 hr	34	%	
257°F, 70 hr	46	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 5 sec, Extruded	69		
Shore A, 5 sec, Injection Molded	71		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	-76.0	°F	ASTM D746
Dynamic Service Temperature	266	°F	
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Ozone Resistance	Excellent		ASTM D1149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	375 to 400	°F
Middle Temperature	385 to 410	°F
Front Temperature	385 to 410	°F
Nozzle Temperature	410 to 430	°F
Processing (Melt) Temp	390 to 430	°F
Mold Temperature	75 to 125	°F
Injection Pressure	750 to 1300	psi

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Injection	Nominal Value	Unit
Injection Rate	Fast	
Screw Speed	50 to 200	rpm
Clamp Tonnage	2.0 to 3.5	tons/in²
Cushion	0.200 to 0.500	in

Injection Notes

Holding Time: 5 to 7 Sec.
Cooling Time: 30 to 50 Sec.

Extrusion	Nominal Value	Unit
Hopper Temperature	330 to 350	°F
Cylinder Zone 1 Temp.	340 to 375	°F
Cylinder Zone 2 Temp.	340 to 375	°F
Cylinder Zone 3 Temp.	340 to 375	°F
Cylinder Zone 4 Temp.	340 to 375	°F
Cylinder Zone 5 Temp.	340 to 375	°F
Adapter Temperature	375 to 410	°F
Melt Temperature	375 to 390	°F
Die Temperature	375 to 410	°F
Screw L/D Ratio	24.0:1.0	

Extrusion Notes

Compression Zone: 355 - 390°F (180 - 200°C)
Metering Zone: 375 to 410°F (190 to 210°C)
Screw Speed: 30 - 80 rpm
Screen Pack: 20/40/60

Notes

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