



TPV – 165A Datasheet

Description:

TPV – 165A thermoplastic vulcanizate is a fully crosslinked, EPDM/PP compound. It is designed to replace thermoset elastomers, such as EPDM or polychloroprene, and traditional thermoplastic TPVs. TPV – 165A provides the performance of vulcanized rubber with the advantage of low-cost thermoplastic processing. Excellent oil and chemical resistance with a maximum service temperature of 275°F.

Applications:

Suitable for applications requiring flexibility in the following markets: automotive, appliance, business machines, construction, consumer products, electrical & electronics, fluid delivery, hardware, wire and cable, and medical devices.

PROPERTY	Typical Value	Units	Test Method
PHYSICAL			
<u>Hardness</u>			
Injection Molded, 5 sec	64	Shore A	ASTM D2240
Extrusion, 5 sec	59		ISO 868
<u>Specific Gravity</u>			
23°C	.97		ASTM D792
	.98		ISO 1183
<u>IRM 903 Oil, Vol. Swell</u>			
70 hr @ 125°C	110	%	ASTM D471
	106		ISO 1817
<u>Compression Set [125C, 70H]</u>			
22 hr @ 70°C	29		ASTM D395
	-		ISO 815
70 hr @ 125°C	45		ASTM D395
70 hr @ 125°C	40	%	ISO 815
Brittle Point	-60	°C	ASTM D746
	-70		ISO 812
<u>Ozone Resistance</u>			
500 hr, 100 pphm O ₃ conc.	Good		ASTM D1149
MECHANICAL			
<u>Tensile Strength</u>			
23°C, 500 mm/min	7.6	Mpa	ASTM D412
	7.7		ISO 527
<u>Tensile Modulus @ 100%</u>			
23°C, 500 mm/min	2.7	Mpa	ASTM D412
	2.1		ISO 527
<u>Ultimate Elongation</u>			
23°C, 500 mm/min	540	%	ASTM D412
	670		ISO 527
<u>Tear Strength</u>			
23°C, 500 mm/min	34	kN/m	ASTM D624 (Die C)
	27		ISO 34 (Die C)