



TPV-46D- 400N Datasheet

Description:

TPV – 46D – 400N thermoplastic vulcanizate is a natural fully crosslinked, EPDM/PP compound. It is designed to replace thermoset elastomers, such as EPDM or polychloroprene, and traditional thermoplastic TPVs. TPV – 46D – 400N 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 in the following markets: industrial, automotive, appliance, business machines, construction, consumer products, electrical & electronics, fluid delivery, hardware, wire and cable, and medical devices.

PROPERTY	Typical Value	Units	Test Method
<u>PHYSICAL</u>			
<u>Hardness</u>			
Injection Molded, 5 sec	46		ASTM D2240
Extrusion, 5 sec	44	Shore D	ISO 868
Injection Molded, 15 sec	44		
<u>Specific Gravity</u>			
23°C	.96		ASTM D792
	.96		ISO 1183
<u>Compression Set [125C, 70H]</u>			
24 hr @ 23°C	49	%	ASTM D395 ISO 815
72 hr @ 125°C	75		ASTM D395 ISO 815
<u>Brittle Point</u>			
	-50	°C	ASTM D746
	-60		ISO 812
<u>Ozone Resistance</u>			
500 hr, 100 pphm O ₃ conc.	Excellent		ASTM D1149
<u>MECHANICAL</u>			
<u>Tensile Strength</u>			
23°C, 500 mm/min	20.0 (2900)	MPa (PSI)	ASTM D412 ISO 527
<u>Tensile Modulus @ 100%</u>			
23°C, 500 mm/min	10.9 (1580)	MPa (PSI)	ASTM D412 ISO 527
<u>Ultimate Elongation</u>			
23°C, 500 mm/min	700	%	ASTM D412 ISO 527
<u>Tear Strength</u>			
23°C, 500 mm/min	97 (555)	kN/m (lb/in)	ASTM D624 (Die C) ISO 34 (Die C)

