



TPV-45A- 400N Datasheet

Description:

TPV – 45A – 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 – 145A – 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. This is an FDA compliant grade.

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
<u>PHYSICAL</u>			
<u>Hardness</u>			
Injection Molded, 5 sec	46	Shore A	ASTM D2240 ISO 868
Extrusion, 5 sec	45		
Injection Molded, 15 sec	45		
<u>Specific Gravity</u>			
23°C	.92		ASTM D792
	.93		ISO 1183
<u>Compression Set [125C, 70H]</u>			
24 hr @ 23°C	13		ASTM D395 ISO 815
72 hr @ 125°C	35	%	ASTM D395 ISO 815
<u>Brittle Point</u>			
	-60	°C	ASTM D746
	-70		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	3.0	Mpa	ASTM D412
	5.6		ISO 527
<u>Tensile Modulus @ 100%</u>			
23°C, 500 mm/min	1.5	Mpa	ASTM D412
	1.8		ISO 527
<u>Ultimate Elongation</u>			
23°C, 500 mm/min	400	%	ASTM D412
	420		ISO 527
<u>Tear Strength</u>			
23°C, 500 mm/min	13	kN/m	ASTM D624 (Die C)
	12		ISO 34 (Die C)

