Product Data Sheet
TREXPRENE® D50NU
PP/EPDM Based Vulcanized TPR

Product Description: TREXPRENE® D50NU is a heat stabilized PP/EPDM based Thermoplastic Vulcanized Elastomer (TPV). This Natural compound is intended primarily for underhood applications such as mats, seals, gaskets, air ducts, CVJ boots, covers, grommets or other parts where softness and conformity are needed. This material can be processed using Injection Molding, Extrusion, Blow Molding or other melt processing techniques.

Property	Test Method	Unit	Typical Values
Hardness	ISO 868	Shore D (15 second delay)	50±3
Density	ISO 1183	g/cm^3	0.93±0.03
Tensile Strength, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	18.7 (2710 psi)
Tensile Stress at 100%, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	13.9 (2010 psi)
Ultimate Elongation, perpendicular to flow	ISO 37, Type 1, 500mm/min	%	700
Tear Strength, perpendicular to flow	ISO 34-1, Method B, 500 mm/min	N/mm	91.4 (520 lbf)
Compression Set at 70°C/24hrs	ASTM D395-B, ISO 815-A	%	63
Brittle Temperature	ASTM D746, ISO 812B	°C	-30
Long Term Heat Aging Performance	1000 h @ 135°C followed by ISO 37	% Retention Tensile % Retention Elongation	113.1 87.3
Short Term Heat Aging Performance	168 h @ 150°C followed by ISO 37	% Tensile change % Elongation change % Tensile @ 100% Elongation change	-7.1 -16.2 11.4

Fluid Resistance	ISO 1817, 70 125°C/70hrs immersed in RM903 fluid	% Tensile change % Elongation change % Tensile @ 100% Elongation change % Volume change % Tear Strength change	-26 -34 -11 32 -48
Ozone Resistance	ISO 1431-1, "A" 100pphm, 40°C	Rating	0