Product Data Sheet TREXPRENE® A40NU PP/EPDM Based Vulcanized TPR

Product Description: TREXPRENE® A40NU 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 A (15 second delay)	41±3
Density	ISO 1183	g/cm ³	0.91±0.03
Tensile Strength, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	3.0 (435 psi)
Tensile Stress at 100%, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	1.1 (160 psi)
Ultimate Elongation, perpendicular to flow	ISO 37, Type 1, 500mm/min	%	300
Tear Strength, perpendicular to flow	ISO 34-1, Method B, 500 mm/min	N/mm	12.0 (68 lbf)
Compression Set at 125°C/70hrs 70°C/22hrs	ASTM D395-B, ISO 815-A	%	20 30
Brittle Temperature	ASTM D746, ISO 812B	°C	-56
Long Term Heat Aging Performance	1000 h @ 135°C followed by applicable test method	Hardness Change % Tensile Change % Elongation Change % Tensile @ 100% Elongation change	±5 +10 to -25 +10 to -30 ±20
Short Term Heat Aging Performance	168 h @ 150°C followed by applicable test method	Hardness Change % Tensile Change % Elongation Change % Tensile @ 100% Elongation change	±3 +10 to -20 +10 to -25 ±20
Ozone Resistance	ISO 1431-1, "A" 100pphm, 40°C	Rating	0