

Product Data Sheet
TREXPENE® A45NI
 PP/EPDM Based Vulcanized TPR

Product Description: TREXPENE® A45NI is a heat & UV stabilized PP/EPDM based Thermoplastic Vulcanized Elastomer (TPV). This Natural compound is primarily intended for interior applications and can be processed using extrusion, injection, blow molding or other melt processing techniques.

Property	Test Method	Unit	Typical Values
Hardness	ISO 868	Shore A (15 second delay)	44±3
Density	ISO 1183	g/cm ³	0.95±0.03
Tensile Strength, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	3.2 (460 psi)
Tensile Stress at 100%, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	1.3 (190 psi)
Ultimate Elongation, perpendicular to flow	ISO 37, Type 1, 500mm/min	%	430
Tear Strength, perpendicular to flow	ISO 34-1, Method B, 500 mm/min	N/mm	19.0 (110 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	±3 +10 to -20 +10 to -25 ±12
Colorfastness to Light	SAE J2412, 1240.8 kJ/m ²	Change in Color Visual Defects	ΔE < 3.0 No Objectionable defects

Wear Resistance	ASTM D3844, 100 cycles, CS10 Wheel, 500 g load	Visual Appearance	No appreciable loss of grain, texture or color
Flammability / Burn rate	FMVSS 302, GMW3232 ISO 3795	mm/min	15.2