

Product Data Sheet

TREXPENE® A45BU

PP/EPDM Based Vulcanized TPR

Product Description: TREXPENE® A45BU is a heat stabilized PP/EPDM based Thermoplastic Vulcanized Elastomer (TPV). This Black 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)	44±3
Density	ISO 1183	g/cm ³	0.96±0.03
Tensile Strength, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	3.5 (510 psi)
Tensile Stress at 100%, perpendicular to flow	ISO 37, Type 1, 500mm/min	MPa	1.2 (175 psi)
Ultimate Elongation, perpendicular to flow	ISO 37, Type 1, 500mm/min	%	530
Tear Strength, perpendicular to flow	ISO 34-1, Method B, 500 mm/min	N/mm	20.2 (115 lbf)
Compression Set at 23°C/22hrs 100°C/22hrs	ASTM D395-B, ISO 815-A	%	14.1 33.1
Brittle Temperature	ASTM D746, ISO 812B	°C	-54
Long Term Heat Aging Performance	1000 h @ 110°C followed by applicable test method	Hardness Change % Tensile Change % Elongation Change % Tensile @ 100% Elongation change	+2 -10 -18 +12
Fade Resistance	SAE J2412, 601.6 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