vinmar polymers america

VINPOL™ TPU50DIET

Thermoplastic Polyurethane-Polyether Based for Injection Molding

50 Shore D | Polyether

VINPOL TPU50DIET is a natural colored polyether-based TPU product formulated for injection molding applications and available in pellet form. This product has excellent abrasion resistance and toughness as well as good hydrolytic stability, oil, fuel and solvent resistance. It also provides tood overmolded adhesion to certain Engineering Plastics, such as PC, ABS and PMMA). Typical applications include those requiring FDA, sports shoes, ski tips and ski boot shells, sporting goods, casters, power tool handles, cell phone cases, plugs, animal tags and railroad pads.

Resin Property	Typical Value	Units	Test Method
Density	1.15	g/cm^3	ASTM D-792
Taber Abrasion Resistance	50.0	Mg	ASTM D-1044
Tensile Stress (100% strain)	2,030	psi	ASTM D-412
Tensile Stress (300% strain)	3,920	psi	ASTM D-412
Tensile Strength @ Break	5,950	psi	ASTM D-412
Tensile Elongation @ Break	450	%	ASTM D-412
Tear Strength, Die C	952	lbf/in	ASTM D-624
Compression Set, 75°F, 22 hrs	33	%	ASTM D-395B
Compression Set, 158°F, 72 hrs	46	%	ASTM D-395B
Durometer Hardness	50	Shore D	ASTM D-2240
Brittleness Temperature	-27	°F	DSC
Vicat Softening Temperature	275	°F	ASTM D-1525
Flame Rating, 0.04 in	HB	-	UL 94
Flame Rating, 0.06 in	HB	-	UL 94
Flame Rating, 0.12 in	HB	-	UL 94

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