

Huntsman AVALON[®] 90 ABR Thermoplastic Polyurethane

Category : Polymer , Thermoplastic , Polyurethane, TP , Thermoplastic Polyurethane (TPUR), Polyester Grade

Material Notes:

Introduction: AVALON 90 ABR is a high performance polyester based thermoplastic polyurethane for injection molding. AVALON 90 ABR is part of the AVALON Performance Range and offers a premium soling material for demanding applications where exceptional abrasion resistance is required such as soccer studs and sports cleats. The features offered include: Cut and scratch resistance Excellent abrasion resistance Cold flex resistance Phthalate free TPU Information provided by Alliance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_Huntsman-AVALON-90-ABR-Thermoplastic-Polyurethane.php

Physical Properties	Metric	English	Comments
Density	1.21 g/cc	0.0437 lb/in ³	ISO 2781

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	90	90	ISO 868
Hardness, Shore D	44	44	ISO 868
Tensile Strength at Break	32.0 MPa	4640 psi	ISO 37
Elongation at Break	450 %	450 %	ISO 37
100% Modulus	0.00800 GPa	1.16 ksi	ISO 37
300% Modulus	0.0160 GPa	2.32 ksi	ISO 37
Flexural Modulus	0.0420 GPa	6.09 ksi	ISO 178
Tear Strength	115 kN/m	656 pli	ISO 34B
Abrasion	20	20	mm ³ ; ISO 4649
Compression Set	20 %	20 %	ISO 815

Processing Properties	Metric	English	Comments
Feed Temperature	25.0 - 35.0 Â°C	77.0 - 95.0 Â°F	
Rear Barrel Temperature	190 - 210 Â°C	374 - 410 Â°F	
Middle Barrel Temperature	195 - 205 Â°C	383 - 401 Â°F	
Front Barrel Temperature	200 - 210 Â°C	392 - 410 Â°F	
Nozzle Temperature	185 - 195 Â°C	365 - 383 Â°F	
Mold Temperature	25.0 - 50.0 Â°C	77.0 - 122 Â°F	

Processing Properties	Metric	English	Comments
Hold Pressure	1.00 - 5.00 MPa	145 - 725 psi	
Back Pressure	0.0300 - 0.300 MPa	4.35 - 43.5 psi	
Screw Speed	20 - 80 rpm	20 - 80 rpm	

Descriptive Properties	Value	Comments
Compression Ratio	2-3:1	
L/D Ratio	20-25:1	
Ross Flex	-10Â°C, BS 5131	
Typical Screw Diameter	40-120 mm	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China