

# AVALON® 65 ABX

Thermoplastic Polyurethane Elastomer (Polyester)

Huntsman Corporation

## Message:

AVALON 65 ABX is a high performance polyester based thermoplastic polyurethane for injection moulding.

AVALON 65 ABX is part of the AVALON Perform Range and offers a specially designed, flexible material with improved slip resistance and rubber-like properties, particularly suitable for TPU/PU applications.

The features offered include:

Improved processing

Lower density

Excellent surface definition

Abrasion resistance

Flex resistance

Phthalate free TPU

General Information			
Features	Good flexibility Good wear resistance Excellent appearance		
Uses	Footwear		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	1.13	g/cm <sup>3</sup>	DIN 53479
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	65		DIN 53505
Mechanical	Nominal Value	Unit	Test Method
Abrasion Resistance		mm <sup>3</sup>	DIN 53516
Bending life	> 1.0E+5	Cycles	DIN 53522
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (Break)	> 20.0	MPa	DIN 53504
Tensile Elongation (Break)	> 700	%	DIN 53504
Tear Strength <sup>1</sup>	> 25	kN/m	DIN 53507
Additional Information			
Test plates conditioned 20 hours at 100°C before testing			
Injection	Nominal Value	Unit	
Drying Temperature - Desiccant Dryer	80.0 - 90.0	°C	
Drying Time - Desiccant Dryer	2.0	hr	
Hopper Temperature	25.0 - 35.0	°C	
Rear Temperature	160 - 180	°C	
Middle Temperature	165 - 185	°C	
Front Temperature	165 - 190	°C	

Nozzle Temperature	160 - 185	°C
Mold Temperature	25.0 - 50.0	°C
Injection Pressure	2.00 - 10.0	MPa
Injection Rate	Slow	
Holding Pressure	1.00 - 5.00	MPa
Back Pressure	0.0300 - 0.300	MPa
Screw Speed	20 - 80	rpm
Screw L/D Ratio	20.0:1.0 to 25.0:1.0	
Screw Compression Ratio	2.0 : 1.0 - 3.0 : 1.0	

#### Injection instructions

Typical Screw Diameter : 40 - 120 mm<sup>3</sup> Stage Design

Feed Zone : 0.4L

Compression Zone : 0.3L

Metering Zone : 0.3L

#### NOTE

- Method B, right-angle specimen  
(without cut)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

