

**Product Data Sheet****AVALON® 90 ABU**

Polyester-based Thermoplastic Polyurethane

PRODUCT DESCRIPTION

AVALON® 90 ABU is a polyester-based Thermoplastic Polyurethane (TPU) for injection moulding and part of the AVALON Perform Range. Key features are improved UV stability, abrasion resistance, cut and scratch resistance, excellent multilayer bonding, good low temperature performance and short cycle times.

APPLICATIONS

, premium quality sports plates and top-pieces.

TYPICAL PHYSICAL PROPERTIES

Properties	Key	NORM	Value	Unit
Hardness (after 3 sec.)	M	ISO 7619	90	Shore A
Hardness (after 3 sec.)	M	ISO 7619	44	Shore D
Density	M	ISO 1183-1	1.21	g/cm ³
Tensile strength	M	DIN 53504	45	MPa
Elongation @ break	M	DIN 53504	550	%
Tear strength	M	ISO 34-1	85	N/mm
Abrasion	M	ISO 4649	35	mm ³

M = Injection molded parts to meet DIN & ASTM requirements. Parts tempered for 20 hrs @ 100 °C prior to testing



HEALTH & SAFETY ADVICE

Before undertaking any trials with this product it is essential that all personnel are aware of the necessary precautions that must be taken. These are detailed in the relevant Material Safety Data Sheet (MSDS), which will be provided by Huntsman.

SUPPLY & STORAGE

AVALON® 90 ABU is supplied in bags, drums or octabins. Please contact your customer service to confirm this.

AVALON® 90 ABU has a minimum expected shelf life of 12 months after shipment date. The product should be stored in a dry and cool place in the manufacturer's original packaging.

MATERIAL PREPARATION

AVALON® 90 ABU is supplied pre-dried, however to ensure trouble-free processing it is preferable to dry before use. The recommended drying conditions are:

- 3 hours at 100-110°C in circulating air
- 3 hours at 80-90°C in dehumidified air
- Dew point: -30°C

PHYSICAL FORM

Type: Transparent pellets

PROCESSING PARAMETERS

Processing Parameter: Injection Molding

Temperature Profile	°C
Feed Zone:	25 - 40
Barrel:	190 - 210
Nozzle:	185 - 195
Mold:	20 - 50

For further information, please contact your nearest sales office: http://www.huntsman.com/PU_customer_service

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