



# Product Data Sheet AVALON® 55 AHG Polyester-based Thermoplastic Polyurethane

# **PRODUCT DESCRIPTION**

AVALON® 55 AHG is a polyester based Thermoplastic Polyurethane (TPU) for injection moulding and part of the AVALON Soft Range. Key features are , phthalate-free and good oil and solvent resistance.

# **APPLICATIONS**

Thin wall technical parts, safety boots, high quality casual and fashion footwear and sports footwear.

## **TYPICAL PHYSICAL PROPERTIES**

Properties	Key	NORM	Value	Unit
Hardness (after 3 sec.)	М	ISO 7619	54	Shore A
Density	М	ISO 1183-1	1,14	g/cm³
Tensile strength	М	DIN 53504	12	MPa
Elongation @ break	М	DIN 53504	650	%
Tensile stress @ 100% elongation	М	DIN 53504	1,6	MPa
Tensile stress @ 300% elongation	М	DIN 53504	3,5	MPa
Tear strength	М	ISO 34-1	30	N/mm
Abrasion	М	ISO 4649	45	mm³

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

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### **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® 55 AHG is supplied in bags, drums or octabins. Please contact your customer service to confirm this

AVALON® 55 AHG 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® 55 AHG is supplied pre-dried, however to ensure trouble-free processing it is preferable to dry before use. The recommended drying conditions are:

- 4 hours at 50°C in dehumidified air
- Dew point: -30°C

### **PHYSICAL FORM**

Type: Opaque pellets

### PROCESSING PARAMETERS

Processing Parameter: Injection Molding

Temperature Profile °C

Feed Zone: 25 - 40

Barrel: 150 - 175

Nozzle: 150 - 165

Mold: 20 - 50

 $For further information, please contact your nearest sales of fice: {\tt http://www.huntsman.com/PU\_customer\_service} and {\tt http://www.huntsman.com/PU\_customer\_service} and$ 

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