



PRODUCT DATA

AVALON[®] light 550 B

Thermoplastic Polyurethane

INTRODUCTION

AVALON light 550 B is a high performance TPU blend for injection moulding and direct on applications.

AVALON light 550 B has been developed for quality products with densities between 0.65 and 0.75 g/cm³ depending on design and process.

CHARACTERISTICS

- Easy processing
- Lightweight
- Excellent fluidity
- Consistent colour distribution
- Direct-on approved

Table 1: Typical Physical Properties ⁽¹⁾

Property	Method	Unit	Value
Density	DIN 53479	g/cm ³	0.65
Hardness, Shore A	DIN 53505	A	48
Hardness, Shore D	DIN 53505	D	-
Tensile Strength	DIN 53504	MPa	> 5
Elongation at Break	DIN 53504	%	> 500
Tear Strength (Angle)	DIN 53507	kN/m	> 10
Abrasion Resistance	DIN 53516	mg	< 200
Flex Performance	DIN ISO 132	k.cycles	-

⁽¹⁾ : Test plates.

HEALTH AND 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 Safety Data Sheet that will be provided by Huntsman.

PRODUCT SELECTION

Before selecting this product it is necessary that the user ensures its performance will meet all operational and end use requirements. Should changes be contemplated in method of application, materials, service conditions or any other then further check are strongly recommended.

The type and quantity of any colorant or additive used may have an effect on processing and/or properties.

For assistance with particular problems and applications, please contact the AVALON TPU Technical Service Department.

PACKAGING & STORAGE

AVALON TPU is supplied in 25 kg moisture guarded sacks, 45 per pallet and shrink wrapped.

AVALON light 550 B has an expected shelf life of minimum 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 TPU grades are supplied pre dried in moisture guarded sacks.

For specific advice on colouring AVALON TPU grades, the use of additives and regrind, please contact the AVALON TPU Technical Service group.



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ESSENTIAL MOULDING MACHINE REQUIREMENTS

- Accurate machine temperature control +/- 1 °C
- Machine hydraulic pressure > 160 bar
- Non return valve on hydraulics
- Shut off nozzle
- Ability to set back pressure
- Mould temperature control

MOULD CONSIDERATIONS

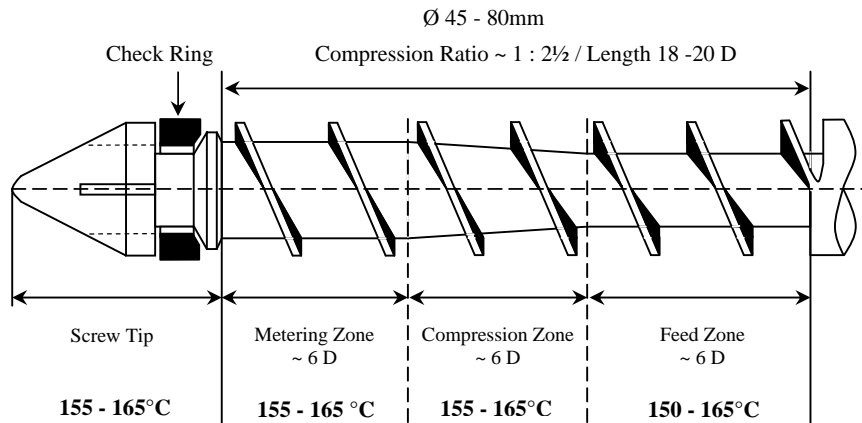
Correct mould design ensure optimum performance and processing of Avalon light 550 B technology.

To avoid shear degradation the runner system should be as generous as possible with a full round/ circular or trapezoid section offering the best results.

Gating should be as large as possible with a relatively short length to ensure maximum transference of holding pressure.

Good venting techniques should be employed to eliminate air trapping and burn marks.

TYPICAL SCREW DESIGN AND PROCESSING



Enquiries should be addressed to the nearest Huntsman Sales Office or to:
Huntsman (Europe) BVBA, Everslaan 45, B-3078 Everberg, Belgium.
Tel: +32 2 758 98 74 Fax: +32 2 758 90 18

The address of your nearest technical centre is:

Huntsman (Europe) BVBA, Everslaan 45, B-3078 Everberg, Belgium.
Tel: +32 2 758 98 74 Fax: +32 2 758 90 18

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