

## PROCESSING GUIDE

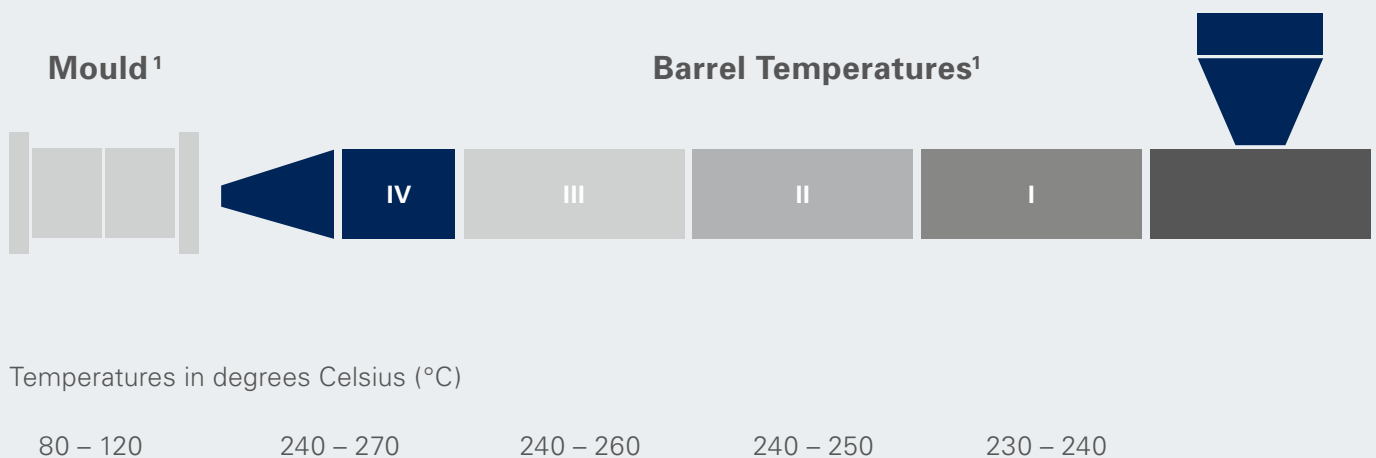
ALCOM<sup>®</sup> LB PBT is a Polybutylene Terephthalate, a semi crystalline thermoplastic, filled with special additives for an optimal light blocking and light reflecting.

### PRE-TREATMENT

ALCOM<sup>®</sup> LB PBT is a hygroscopic polymer. Due to absorption of moisture from the air, drying is mandatory in order to avoid material degradation and surface defects. Storage at ambient temperature before use will minimise condensation risk.

### PROCESSING

ALCOM<sup>®</sup> LB PBT may be processed on all standard injection moulding machines. Wear protected plasticising units are advised.



Temperatures in degrees Celsius (°C)

<sup>1</sup> Guide values. Standard starting profile might be in the middle.

	Unit	Notes	
<b>Properties</b>			
Polymer abbreviation		PBT	
Density (ISO 1183)	g/cm <sup>3</sup>	1.44 (see Technical Data Sheet)	
<b>Injection Machinery</b>			
Screw stroke		Metering stroke between 1 x D and 3 x D	
Screw type		Three zone screw with L/D ratio 18:1 to 22:1	
Nozzle type		Open or shut-off possible	
Hopper type		Standard	
<b>Pre-processing</b>			
Storage		Dry, protected from heat and light	
Dryer type		Air circulating	Dry air
Drying time	h	4 – 8	2 – 4
Drying temperature	°C	100 – 120	100 – 120
Permissible moisture content	%	< 0.02	
<b>Processing Conditions</b>			
Melt temperature range	°C	250 – 270	
Mould temperature range	°C	80 – 120	
Coolant		Water	
Throughput coolant		To ensure turbulent flow	
Peripheral screw speed	mm/s	50 – 300, e.g. screw speed of 35rpm with a screw diameter of 50 mm	
Back pressure (specific)	bar	50 – 150	
Residence time	minutes	4 – 8	
Injection speed		Profile for constant flow front speed	
<b>Shrinkage<sup>2</sup></b>			
Shrinkage range (ISO 294-4)	%	1.7 – 1.9	

<sup>2</sup> Shrinkage is influenced by the part geometry, the wall thickness of the moulding, the position and size of the gate and the processing parameters.

**HEAD OFFICE**

ALBIS PLASTIC GmbH  
 Mühlenhagen 35 · 20539 Hamburg  
 Telephone: +49 40 7 81 05-0  
 Fax: +49 40 7 81 05-361  
 info@albis.com · www.albis.com

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended. The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations.

NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.