

WHT-1590

Description	WHT-1590 is polyester-based TPU for injection molding and extrusion applications, supplied in form of transparent, translucent, colorless or slightly yellowish pellets with Excellent strength , resilience and abrasion resistance
Application	Shoes, Seals, Hose, Cable, Conveyor Belt, Auto Part etc
Working instructions	<p>According to our experience, the characteristics of the extruder that are suitable for processing WHT-1590 are the following:</p> <ul style="list-style-type: none"> • L/D ratio between 25:1 and 30:1 for extrusion • L/D ratio between 18:1 and 22:1 for injection molding • The extruder screw must have 3 zones and a compression ratio between 2:1 and 3:1. Screws with a compression ratio greater than 4:1 should be avoided. • The screw should have a continuous regulation device and a working power higher than for processing other plastics.

For optimum results, previous drying of the product during 2-3 hours at 90-110°C is advisable, in a hot air circulatory, vacuum or desiccant-air dryer. The suggested processing-temperature profiles for injection are depicted in the table below.

Injection Molding Conditions Guideline for WHT-1590

Product	Nozzle (°C)	Metering(°C)	Compression(°C)	Feed (°C)	Pressure (Mpa)	Drying Temp.(°C)
1590	210	205	200	195	60	90-100

Extrusion Molding Conditions Guideline for WHT-1590

Product	Die (°C)	Metering (°C)	Compression(°C)	Feed (°C)	Drying temperature(°C)	Drying time (H)
1590	205	205	200	195	90-100	3-4

Regrind usage

Where end-use requirements permit, up to 20% resin regrind may be used with virgin material, provided that the material is kept free of contamination and is properly dried (see section on Drying). Any regrind used must be generated from properly molded/extruded parts, sprues, runners, trimmings, and/or films. All regrind used must be clean, uncontaminated, and thoroughly blended with virgin resin prior to drying and processing. Under no circumstances should degraded, discolored, or contaminated material be used for regrind. Materials of this type should be discarded. Improperly mixed and/or dried regrind may diminish the desired properties. It is critical that you test finished parts produced with any amount of regrind to ensure that your end-use performance requirements are fully met.

Disclaimer

The information provided here is for reference only. The specification will be provided in the quality certificate or in the contract. It is the user's responsibility to test the material and its suitability for a process. We have no control over what another party does with the material and we cannot take any responsibility for another party's action. Nor will we be responsible for any indirect damages while using our products. The user is welcome to contact our customer and technical service center with questions on our products

Property

PROPERTY	Method Astm	Units	1590
Hardness	ASTM D 2240	Shore A	92
Density	ASTM D 792	g/cm ³	1.20
100% modulus	ASTM D 412	MPa	8.1
300% modulus	ASTM D 412	MPa	14.7
Tensile strength	ASTM D 412	MPa	34.4
Ultimate elongation	ASTM D 412	%	560
Tear strength	ASTM D 624	N/mm	127
Tg	ASTM D 3417	°C	-25

These products can only be ordered in typical quantities.

Please contact your sales representative for details.