

WHT-1180H

Description	WHT-1180H is polyester-based TPU, supplied in form of transparent, translucent, colorless or slightly yellowish pellets as a rigid polymer for injection molding. Engineered to provide high toughness, excellent tear strength, outstanding abrasion, hydrolytic and oil resistance.
Application	Components for automobile parts, building and construction, agriculture, industrial equipment, compounding and modifier, etc..
Working instructions	<p>According to our experience, the characteristics of the extruder that are suitable for processing WHT-1180H is the following:</p> <ul style="list-style-type: none"> • 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 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.

Property

PROPERTY	Method	Units	1180H
Hardness	ASTM D 2240	Shore D	79
Density	ASTM D 792	g/cm3	1.21
100% modulus	ASTM D 412	MPa	33
300% modulus	ASTM D 412	MPa	38
Tensile strength	ASTM D 412	MPa	46
Ultimate elongation	ASTM D 412	%	430
Tear strength	ASTM D 624	N/mm	237
Abrasion loss	ISO 4649	mm3	44

These products can only be ordered in typical quantities.

Please contact your sales representative for details.

Injection Molding Conditions Guideline for WHT-1180H

Product	Nozzle (°C)	Metering(°C)	Compression(°C)	Feed (°C)	Pressure (Mpa)	Drying Temp.(°C)
1180H	220	215	210	205	70	110

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