

WHT-8180

Description	WHT-81 series TPU are polyether-based TPU, supplied in form of transparent, translucent, colorless or slightly yellowish pellets with the characteristic of excellent hydrolytic stability, fungus resistance, low temperature flexibility & UV resistance.
Applications	Wire & Cable, Film & Sheet, Hose & Tube, Animal Tag, Fire Hose, Sports Equipments etc.
Working Instructions	<p>According to our experience, the characteristics of the extruder or injection molding machine that are suitable for processing WHT-81 series 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 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 the working power higher than that for processing other plastics.

For optimum results, previous drying of the product during 3-4 hours at 80~90°C is advisable, in a hot air circulatory, vacuum or desiccant-air dryer. The suggested processing-temperature profiles are depicted in the table below.

Property

PROPERTY	Method	Units	8180
Hardness	ASTM D 2240	Shore A	82
Density	ASTM D 792	g/cm ³	1.10
100% Modulus	ASTM D 412	MPa	6
300% Modulus	ASTM D 412	MPa	10
Tensile Strength	ASTM D 412	MPa	25
Ultimate Elongation	ASTM D 412	%	600
Tear Strength	ASTM D 624	N/mm	75
Tg	DSC	°C	-45

These products can only be ordered in typical quantities.

Please contact your sales representative for details.

Injection Molding Conditions for WHT-8180

Product	Nozzle (°C)	Metering(°C)	Compression(°C)	Feed (°C)	Pressure (MPa)
8180	185	180	175	170	65

Extrusion Molding Conditions for WHT-8180

Product	Die (°C)	Metering (°C)	Compression(°C)	Feed (°C)
8180	175	180	175	170

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



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