

Technical Data Sheet

Revision Date: 2020-04-22
Name: WHC-BM180C

NO.WHPU_0001
Version: 6.0

Type

Polyester-based black masterbatch.

Features

WHC-BM180C is specially design for extrusion/Injection applications. The suggested added ratio is 2%.

Applications

Films, belts, and pipes

Typical Properties*	Test Method	Units	WHT-1185+2% BM180C
Shore Hardness	ASTM D 2240	Shore A	85
Specific Gravity	ASTM D 792	g/cm ³	1.2
△L	ASTM D2244	≤0.4	-0.18
△A	ASTM D2244	≤0.3	0.02
△B	ASTM D2244	≤0.3	0.15
△E	ASTM D2244	≤0.6	0.24

*All these physical properties are based on injection molded samples1185+2%BM180C, which are conditioned at 23 °C / 50% for 24h

Above values are typical values and should not be used as specifications.

Processing Recommendations

Based on our experience, the features of recommended screw are the following:

1. L/D ratio should be between should be28 and 32
2. The appropriate compression ratio is from 1:2 to 1:3.
3. The screw extruder should have three sections which have continued constant pitch. The distance between screw and barrel should be 0.1 to 0.2 mm. Depending on the size and type of the screw and die, the breaker plates used should have holes of 1.5 to 5 mm.

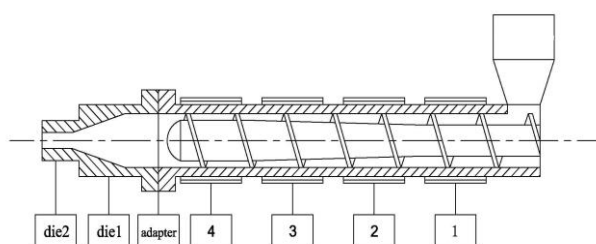
4. TPU is shear sensitive, for this reason, the extruder's speed should be low in case of degradation during processing.

Drying

WanColor® materials are supplied pre-dried in moisture guarded bags. Dry WHC-BM180C will rapidly absorb moisture when exposed to atmosphere. For trouble free products, WHC-BM180C must be dried before processing. It is recommended to dry the material at 100-110 °C for 2-3 h in a circulating air or dehumidified air dryer. The moisture content must be lower than 0.03% before and during processing.

Typical Processing Conditions

WHC-BM180C can be blown and extruded. Typical processing conditions are listed in the following tables and figures. You can contact our TECHNICAL SERVICE for further inquiries about products or troubleshooting.



Type: screw: 45mm, L/D: 30, compression ratio 3:1

	Zone1	Zone2	Zone3	Zone4	Adaptor	Die1	Die2
°C	190	200	205	205	205	200	200

Packaging

Wanthane® WHC-BM180C is packaged in the form of uncolored transparent pellets in PE-lined bags of 25 Kg net weight (1000 Kg/pallet).

Storage

Wanthane® should be inspected to assure containers are not broken during transportation. Containers should be stored in a cool and dry environment, and should be brought to room temperature before opening in order to prevent condensation. Once being used, containers with residual materials should be sealed. It is necessary to cover the feed hopper of the processing machine.

Health and Safety

Wanthane® materials have no hazardous reactions observed. The waste can be discarded to public garbage cans. When contacting or processing this product, it is recommended that all personnel wear eye/face protection and suitable protective clothing. Any further safety information about this product is available in our [technical service](#) center.

Version Information:

Date of first issue: June 6, 2013.

Date of 1st revise: Feb 6, 2015 Reason for revision: The need of product classification.

Date of 2nd revise: May 5, 2015 Reason for revision: A change of company address.

Date of 3rd revise: Aug.18, 2015 Reason for revision: Unified the template of TDS.

Date of 4th revise: May 31, 2016 Reason for revision: Change of product standard.

Date of 5th revise: Apr. 22, 2017 Reason for revision: Change of company LOGO.

For further information please contact us:

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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.