

Technical Data Sheet

Type: Pearlbond[™] **5713** TPU is a Polyester-Type Thermoplastic Polyurethane (TPU).

Uses: Hot melt adhesive, solution cast films for lamination on fabrics.

SPECIFICATION

Melt Flow Index (190° C / 8.7 Kg)

10 - 30 g/10 min

ISO 1133

CHARACTERISTICS

Physical Properties	Value (Metric)	Unit	Test Method
Shore Hardness	90/45	A/D	ISO 868
Specific Gravity	1.22	g/cm ³	ISO 2781 (ASTM D-792)
Softening range	85-90	° C	MQSA 70A
Melting range	115-120	° C	MQSA 70A
Activation temperature	82	° C	LA-17
Tensile strength	38 (5511)	MPa (psi)	ISO 527
Ultimate elongation	550	%	ISO 527
100% Elongation	5 (725)	MPa (psi)	ISO 527
300% Elongation	9 (1305)	MPa (psi)	ISO 527

^{*}These are typical values & should not be used for establishing specifications.

EXTRUSION PROFILE

The suggested processing-temperature profiles for extrusion are depicted in the figure below:



Zone 1	170° C (338° F)	180° C (356° F)
Zone 2	180° C (356° F)	190° C (374° F)
Zone 3	185° C (365° F)	195° C (383° F)
Zone 4	190° C (374° F)	200° C (392° F)
Die	180° C (356° F)	190° C (374° F)

L/D ratio. - 25:1-10:1, Cooling. - air, Screw.- 2:1-3:1, Speed.-30 rpm -Thickness die.- 0,2 mm

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc. shall not be liable for any United Portion of the product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc. shall not be liable for any United Portion of the product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be used to be used. Full-scale testing and end product performance or reproducibility of the user. Lubrizol Advanced Materials, Inc. shall not be used. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be used. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be user. Lubrizol Advanced Materials, Inc. sha

© 2018 The Lubrizol Corporation.

All rights reserved. All marks are the property of The Lubrizol Corporation.







PACKAGING

Pearlstick™ 5713 TPU is supplied in pellet form and packaged in 1000 lb boxes.

HEALTH AND SAFETY

A safety data sheet on **Pearlbond™ 5713** is available, with all safety information. The usual safety practices in the handling of chemicals should be observed, i.e.: good ventilation in the working area, gloves and protective goggles.

For further information refer to Lubrizol Advanced Materials processing guides.

STORAGE

Pearlbond™ 5713 must be stored in a cool (15–25°C) and environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

Our TECHNICAL SERVICE will answer any inquiries about our product and its applications.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information of then is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

http://go.lubrizol.com/EP

© 2018 The Lubrizol Corporation.

All rights reserved. All marks are the property of The Lubrizol Corporation.

