

Technical Data Sheet

Type: Pearlstick™ 5701F51 is an aromatic polyester-based thermoplastic polyurethane.

Main Application: Hot Melt Adhesive; Solution coating.

Physical Properties*	Value (Metric)	Unit	Test Method
Hardness	A/1 : 85	Shore A/D	ISO 868
Specific Gravity	1.19	g/cm ³	ISO 2781
Tensile Strength	25	MPa	ISO 527-2/5A/200
Ultimate Elongation	550	%	ISO 527-2/5A/200
Tensile Stress at 50% Elongation	4	MPa	ISO 527-2/5A/200
100% Elongation	5	MPa	ISO 527-2/5A/200
300% Elongation	10	MPa	ISO 527-2/5A/200
Tear Strength Unnicked	75	kN/m	ISO 34-1B
Kofler Melting Point	130	°C	Lubrizol

*Based on solution cast films of 30-50 microns thickness.

Solubility		Solution Viscosity Specification Values 15% Total Solids in THF	
Methylethylketone (MEK)	Swelling	Brookfield RVT viscosimeter	50 – 150 mPa.s
Dimethylformamide (DMF)	Soluble		
Tetrahydrofuran	Soluble		
Ethylacetate	Insoluble		
Cyclohexanone	Soluble		
		<ul style="list-style-type: none"> • Spindle n° 2 • 20 rpm • 23° C 	

Listed values are “typical (average) values” and should/cannot be applied for specification purposes.

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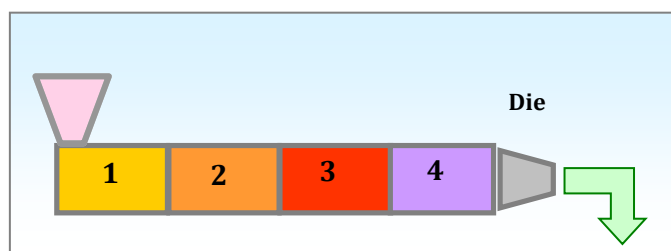


<http://go.lubrizol.com/EP>

EXTRUSION PROCESS

For optimum results, previous drying of the product during 2-3 hours at 60-70° C is advisable, in a hot air circulatory, vacuum or desiccant-air dryer.

The suggested processing-temperature profiles for film extrusion (flat film) are depicted in the figure below:



Zone 1	110° C (° F)	130° C (° F)
Zone 2	135° C (° F)	155° C (° F)
Zone 3	140° C (° F)	160° C (° F)
Zone 4	135° C (° F)	155° C (° F)
Die	130° C (° F)	150° C (° F)

HEALTH AND SAFETY

A safety data sheet on **Pearlstick™ 5701F51** is available, with all information related to safety. 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

Pearlstick™ 5701F51 NAT021 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.

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