

# Pearlthane® 12F75UV

Thermoplastic Polyurethane Elastomer (Polyester)

Lubrizol Advanced Materials, Inc.

Message:

Pearlthane® 12F75UV is a UV-resistant standard polyester-based TPU supplied in form of translucent, colourless pellets, featuring a low melting point and very low gel content. Processed by extrusion and compounding.  
Pearlthane® 12F75UV is designed for a wide variety of adhesive film applications requiring excellent adhesion in combination with good heat resistance. This grade can be both cast extruded and blown. Otherwise this grade is also adequate for PVC compounding.

General Information			
Features	Low speed solidification crystal point		
	Good UV resistance		
	Good adhesion		
	Heat resistance, medium		
Uses	Films		
	Composite		
	cast film		
	Adhesive		
Agency Ratings	EC 1907/2006 (REACH)		
	FDA 21 CFR 177.2600		
Appearance	Translucent		
	Colorless		
Forms	Particle		
Processing Method	Blow film		
	Composite		
	Extrusion		
	cast film		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.19	g/cm <sup>3</sup>	ASTM D792
20°C	1.19	g/cm <sup>3</sup>	ISO 2781
Moisture Content		%	Internal method
Abrasion Loss	35.0	mm <sup>3</sup>	ISO 4649
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	78		ASTM D2240, ISO 868
Elastomers	Nominal Value	Unit	Test Method

Tensile Stress			ASTM D412, ISO 527
100% strain	5.00	MPa	ASTM D412, ISO 527
300% strain	6.50	MPa	ASTM D412, ISO 527
Tensile Strength (Yield)	30.0	MPa	ASTM D412, ISO 527
Tensile Elongation (Break)	620	%	ASTM D412, ISO 527
Tear Strength			
-- <sup>1</sup>	155	kN/m	ASTM D624
--	160	kN/m	ISO 34-1
Compression Set			ASTM D395B
23°C, 70 hr	30	%	ASTM D395B
70°C, 24 hr	55	%	ASTM D395B
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature <sup>2</sup>	-30.0	°C	ISO 11357-2
Melting Temperature <sup>3</sup>	130 - 140	°C	Internal method
Extrusion	Nominal Value	Unit	
Drying Temperature	90.0 - 105	°C	
Drying Time	1.0 - 2.0	hr	
Cylinder Zone 1 Temp.	145 - 155	°C	
Cylinder Zone 2 Temp.	155 - 165	°C	
Cylinder Zone 3 Temp.	165 - 175	°C	
Cylinder Zone 4 Temp.	170 - 185	°C	
Die Temperature	170 - 185	°C	
Extrusion instructions			
L/D Ratio: 25:1 to 30:1Screw Compression Ratio: 2:1 to 3:1Screw Speed: 12 to 60 rpm			
NOTE			
1.	C mould		
2.	10°C /min		
3.	Temperature at which MFI = 10 g/10 min @ 21.6 kg		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT