

Texin® 1212

Thermoplastic Polyurethane Elastomer (Polyester)

Covestro - PUR

Message:

Texin 1212 resin is an aromatic polyester-based thermoplastic polyurethane with a Shore hardness of approximately 60D.

General Information			
Features	Low speed solidification crystal point		
	Solvent resistance		
	Good wear resistance		
	Good chemical resistance		
	Oil resistance		
	Compliance of Food Exposure		
	Medium transparency		
Uses	Films		
	Cable sheath		
	Pipe		
	Pipe fittings		
	Sheet		
	Footwear		
	Profile		
Agency Ratings	FDA 21 CFR 177.1680		
	FDA 21 CFR 177.2600		
Appearance	Natural color		
Processing Method	Blow molding		
	Extrusion		
	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.23	g/cm³	ASTM D792, ISO 1183
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	60		ASTM D2240, ISO 868
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus			ASTM D790, ISO 178
23°C	166	MPa	ASTM D790, ISO 178
70°C	50.3	MPa	ASTM D790, ISO 178
Taber Abrasion Resistance			

1000 Cycles, 1000g, H-18 wheel	60.0	mg	ISO 4649
1000 Cycles, 1000g, H-18 wheel	60.0	mg	ASTM D1044
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412, ISO 37
100% strain	17.9	MPa	ASTM D412, ISO 37
300% strain	32.4	MPa	ASTM D412, ISO 37
Tensile Strength (Yield)	44.8	MPa	ASTM D412, ISO 37
Tensile Elongation (Break)	450	%	ASTM D412, ISO 37
Tear Strength			
-- ¹	200	kN/m	ASTM D624
--	200	kN/m	ISO 34-1
Compression Set ²			ASTM D395B, ISO 815
23°C, 22 hr	16	%	ASTM D395B, ISO 815
70°C, 22 hr	43	%	ASTM D395B, ISO 815
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	-9.00	°C	DMA
Vicat Softening Temperature	121	°C	ISO 306/50, ASTM D1525 ³
Injection	Nominal Value	Unit	
Drying Temperature - Desiccant Dryer	81.0 - 104	°C	
Drying Time - Desiccant Dryer	2.0	hr	
Suggested Max Moisture	< 0.030	%	
Suggested Max Regrind	20	%	
Rear Temperature	191 - 202	°C	
Middle Temperature	193 - 207	°C	
Front Temperature	193 - 207	°C	
Nozzle Temperature	196 - 213	°C	
Processing (Melt) Temp	196 - 207	°C	
Mold Temperature	16.0 - 38.0	°C	
Injection Pressure	41.4 - 103	MPa	
Injection Rate	Moderate		
Back Pressure	< 5.52	MPa	
Screw Speed	40 - 80	rpm	
Cushion	< 3.18	mm	
Injection instructions			
Hold Pressure: 60 to 80% of Injection Pressure			
Extrusion	Nominal Value	Unit	
Drying Temperature	81.0 - 104	°C	
Drying Time	2.0	hr	
Cylinder Zone 1 Temp.	193 - 204	°C	
Cylinder Zone 2 Temp.	193 - 204	°C	
Cylinder Zone 3 Temp.	196 - 210	°C	
Melt Temperature	196 - 207	°C	

Die Temperature	196 - 210	°C
NOTE		
1.	C mould	
2.	Post-cured 16 hr at 230°F	
3.	速率 A (50°C/h)	

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

