

Texin® 4215

Polycarbonate + TPU

Covestro - PUR

Message:

Texin 4215 resin is a blend of polyester-based polyurethane and polycarbonate. This aromatic grade has a Shore hardness of approximately 75D. It can be processed by injection molding or extrusion.

General Information			
Features	High Impact Resistance		
	High Stiffness		
	Low Temperature Resistant		
Uses	Automotive Applications		
	Automotive Bumper		
Processing Method	Extrusion		
	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.21	g/cm ³	ASTM D792, ISO 1183
Molding Shrinkage			ASTM D955, ISO 2577
Flow : 2.54 mm	0.80	%	
Across Flow : 2.54 mm	0.80	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	75		ASTM D2240, ISO 868
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus (23°C)	1100	MPa	ASTM D790, ISO 178
Taber Abrasion Resistance			
1000 Cycles, 1000 g, H-18 Wheel	85.0	mg	ISO 4649
1000 Cycles, 1000 g, H-18 Wheel	85.0	mg	ASTM D1044
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	45.5	MPa	ASTM D412, ISO 37
Tensile Elongation (Break)	130	%	ASTM D412, ISO 37
Tear Strength			
-- ¹	167	kN/m	ASTM D624
--	170	kN/m	ISO 34-1
Bayshore Resilience	52	%	ASTM D2632
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-30°C, 3.18 mm	80	J/m	

23°C, 3.18 mm	960	J/m	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	108	°C	ASTM D648, ISO 75-2/B
1.8 MPa, Unannealed	74.0	°C	ASTM D648, ISO 75-2/A
Brittleness Temperature	< -68.0	°C	ASTM D746, ISO 974
Glass Transition Temperature	-35.0	°C	DMA
Vicat Softening Temperature	140	°C	ISO 306/50, ASTM D1525 ²
CLTE - Flow	9.0E-5	cm/cm/°C	ASTM D696
Flammability	Nominal Value		Test Method
Flame Rating	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Compressive Load			ASTM D575
10% Deflection	31.7	MPa	
15% Deflection	41.4	MPa	
2% Deflection	3.45	MPa	
20% Deflection	56.5	MPa	
25% Deflection	68.9	MPa	
5% Deflection	13.8	MPa	
50% Deflection	130	MPa	
Injection	Nominal Value	Unit	
Drying Temperature - Desiccant Dryer	115 to 120	°C	
Drying Time - Desiccant Dryer	2.0	hr	
Suggested Max Moisture	< 0.030	%	
Suggested Shot Size	40 to 80	%	
Suggested Max Regrind	20	%	
Rear Temperature	221 to 232	°C	
Middle Temperature	227 to 238	°C	
Front Temperature	227 to 238	°C	
Nozzle Temperature	227 to 241	°C	
Processing (Melt) Temp	232 to 238	°C	
Mold Temperature	16.0 to 43.0	°C	
Injection Pressure	41.4 to 103	MPa	
Injection Rate	Slow-Moderate		
Holding Pressure	27.6 to 55.2	MPa	
Back Pressure	0.345 to 1.38	MPa	
Screw Speed	40 to 80	rpm	
Clamp Tonnage	4.1 to 6.9	kN/cm ²	
Cushion	< 3.18	mm	
Screw L/D Ratio	20.0:1.0		
Screw Compression Ratio	2.5:1.0 to 3.0:1.0		
Extrusion	Nominal Value	Unit	

Drying Temperature	115 to 120	°C
Drying Time	2.0	hr
Cylinder Zone 1 Temp.	210 to 227	°C
Cylinder Zone 2 Temp.	216 to 232	°C
Cylinder Zone 3 Temp.	216 to 238	°C
Melt Temperature	232 to 243	°C
Die Temperature	221 to 243	°C

NOTE

1. Die C
2. Rate 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

