

LEXAN™ FST9405T resin

Polycarbonate

SABIC Innovative Plastics

Message:

Lexan® FST9405T resin is a high flow PC Copolymer Resin, suitable for injection molding. This halogen-free flame retardant resin is OSU55/55 and FAR25.583 compliant and an ideal candidate for aircraft interior applications. Available in opaque colors.

General Information			
Features	Copolymer		
	High liquidity		
	Halogen-free		
	Flame retardancy		
Uses	Airplane trim		
Agency Ratings	OSU 55/55		
Appearance	Opacity		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.33	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	9.0	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	10.0	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal method
Flow	0.50 - 0.70	%	Internal method
Transverse flow	0.50 - 0.70	%	Internal method
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	2600	MPa	ASTM D638
--	2600	MPa	ISO 527-2/1
Tensile Strength			
Yield ²	77.0	MPa	ASTM D638
Yield	77.0	MPa	ISO 527-2/50
Fracture ³	70.0	MPa	ASTM D638
Fracture	70.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁴	6.0	%	ASTM D638
Yield	6.0	%	ISO 527-2/50
Fracture ⁵	75	%	ASTM D638
Fracture	95	%	ISO 527-2/50
Flexural Modulus			
50.0mm span ⁶	2700	MPa	ASTM D790

-- ⁷	2500	MPa	ISO 178
Flexural Stress			
--	105	MPa	ISO 178
Yield, 50.0mm span ⁸	115	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁹			ISO 179/1eA
-30°C	No Break		ISO 179/1eA
23°C	No Break		ISO 179/1eA
Charpy Unnotched Impact Strength ¹⁰			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			
-30°C	85	J/m	ASTM D256
23°C	130	J/m	ASTM D256
-30°C ¹¹	9.0	kJ/m ²	ISO 180/1A
23°C ¹²	11	kJ/m ²	ISO 180/1A
23°C ¹³	12	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength ¹⁴			ISO 180/1U
-30°C	No Break		ISO 180/1U
23°C	No Break		ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	60.0	J	ASTM D3763
--	130	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	105	°C	ASTM D648
0.45 MPa, unannealed, 64.0mm span ¹⁵	94.0	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	95.0	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span ¹⁶	104	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	114	°C	ASTM D1525 ¹⁷
--	113	°C	ISO 306/B120
Linear thermal expansion coefficient			ISO 11359-2
Flow: -40 to 40°C	6.0E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	6.0E-5	cm/cm/°C	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
NBS Smoke Density - Flaming, Dmax			ASTM E662
OSU peak heat release rate ¹⁸		kW/m ²	FAR 25.853
OSU total heat release ¹⁹		kW · min/m ²	FAR 25.853
Vertical Burn Test - Test a (60 s), passes at	1.0	sec	FAR 25.853
Injection	Nominal Value	Unit	
Drying Temperature	95 - 100	°C	

Drying Time	6.0 - 8.0	hr
Suggested Shot Size	40 - 60	%
Rear Temperature	230 - 250	°C
Middle Temperature	240 - 270	°C
Front Temperature	250 - 280	°C
Nozzle Temperature	245 - 275	°C
Processing (Melt) Temp	250 - 280	°C
Mold Temperature	50 - 80	°C
Back Pressure	0.300 - 0.700	MPa
Screw Speed	40 - 70	rpm
Vent Depth	0.025 - 0.076	mm

NOTE

1.	5.0 mm/min
2.	Type 1, 50mm/min
3.	Type 1, 50mm/min
4.	Type 1, 50mm/min
5.	Type 1, 50mm/min
6.	1.3 mm/min
7.	2.0 mm/min
8.	1.3 mm/min
9.	80*10*4 sp=62mm
10.	80*10*4 sp=62mm
11.	80*10*4
12.	80*10*4
13.	80*10*3
14.	80*10*3
15.	80*10*4 mm
16.	80*10*4 mm
17.	标准 B (120°C/h), 载荷2 (50N)
18.	5 minute test
19.	2 minute test

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