LEXAN™ FST3403 resin

Polycarbonate

SABIC Innovative Plastics

Message:

LEXAN FST3403 resin is a high flow PC Copolymer Resin, suitable for injection molding. This halogen-free flame retardant resin is EN45545 R6 HL3 compliant and an ideal candidate for train interior applications (category R6). It also meets requirements of DIN5510-2, NFPA-130 and PN-K-02511 standards. Available in opaque colors.

General Information	
Features	Copolymer High liquidity Halogen-free Flame retardancy
Agency Ratings	EN 45545 R6 HL3
RoHS Compliance	RoHS compliance
Appearance	Opacity Available colors
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.33	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	10.0	cm³/10min	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]	80	%	ASTM D638

Fracture	80	%	ISO 527-2/50
Flexural Modulus			
50.0mm span [6]	2500	MPa	ASTM D790
-- [7]	2700	MPa	ISO 178
Flexural Stress			
--	110	MPa	ISO 178
Yield, 50.0mm span [8]	115	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C [9]	10	kJ/m²	ISO 179/1eA
-30°C [10]	5.0	kJ/m²	ISO 179/1eA
23°C [11]	14	kJ/m²	ISO 179/1eA
23°C [12]	13	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength [13]			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			
-30°C	90	J/m	ASTM D256
23°C	130	J/m	ASTM D256
-30°C [14]	6.0	kJ/m²	ISO 180/1A
-30°C [15]	10	kJ/m²	ISO 180/1A
23°C [16]	13	kJ/m²	ISO 180/1A
23°C [17]	12	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength [18]			ISO 180/1U
-30°C	No Break		ISO 180/1U
23°C	No Break		ISO 180/1U
Instrumented Dart Impact			
23°C, Total Energy	80.0	J	ASTM D3763
--	125	J	ISO 6603-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	104	°C	ASTM D648
0.45 MPa, unannealed, 64.0mm span [19]	105	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	93.0	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span [20]	95.0	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	114	°C	ASTM D1525, ISO 306/B50 12 [21]
--	115	°C	ISO 306/B120
Linear thermal expansion coefficient			ASTM E831, ISO 11359-2
Flow: -40 to 40°C	6.0E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Lateral: -40 to 40°C	6.0E-5	cm/cm/°C	ASTM E831, ISO 11359-2

Flammability	Nominal Value	Unit	Test Method
Fire Safety Hazard Level - Requirement set R6	HL3		EN 45545-2
Heat Release, MAHRE - 50 kW/m² (3.00 mm)		kW/m²	ISO 5660-1
Smoke Toxicity - CITG (8 min), 50 kW/m² (3.00 mm)	0.100		ISO 5659-2
Smoke Density			ISO 5659-2
DS-4, 50 kW/m² : 3.00 mm			ISO 5659-2
VOF4, 50 kW/m² : 3.00 mm			ISO 5659-2

Injection	Nominal Value	Unit
Drying Temperature	95.0 - 102	°C
Drying Time	6.0 - 8.0	hr
Suggested Shot Size	40 - 60	%
Rear Temperature	230 - 260	°C
Middle Temperature	240 - 280	°C
Front Temperature	250 - 290	°C
Nozzle Temperature	245 - 285	°C
Processing (Melt) Temp	250 - 290	°C
Mold Temperature	50.0 - 80.0	°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*3 sp=62mm
11.	80*10*4 sp=62mm
12.	80*10*3 sp=62mm
13.	80*10*4 sp=62mm
14.	80*10*3
15.	80*10*4
16.	80*10*3
17.	80*10*4
18.	80*10*3
19.	80*10*4 mm

20.	80*10*4 mm
21.	标准 B (120°C/h), 载荷2 (50N)

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