

LEXAN™ 3412R resin

Polycarbonate

SABIC Innovative Plastics

Message:

20% GR, provides improved mechanical properties and UL94 V-1 rated at 0.058". Internal mold release added.

General Information			
UL YellowCard	E45587-236874	E207780-228393	
Filler / Reinforcement	Glass fiber reinforced material, 20% filler by weight		
Additive	demoulding		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			ASTM D792
--	1.35	g/cm ³	ASTM D792
--	1.36	g/cm ³	ASTM D792
Specific Volume	0.741	cm ³ /g	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	4.3	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.10 - 0.30	%	Internal method
Water Absorption			ASTM D570
24 hr	0.16	%	ASTM D570
Equilibrium, 23°C	0.29	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
Class m	91		ASTM D785
Class r	122		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ¹ (Break)	110	MPa	ASTM D638
Tensile Elongation ² (Break)	5.0	%	ASTM D638
Flexural Modulus ³ (50.0 mm Span)	5520	MPa	ASTM D790
Flexural Strength ⁴ (Yield, 50.0 mm Span)	131	MPa	ASTM D790
Taber Abrasion Resistance (1000 Cycles, 1000 g, CS-17 Wheel)	17.0	mg	ASTM D1044
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	110	J/m	ASTM D256
Unnotched Izod Impact (23°C)	1000	J/m	ASTM D4812
Dart Drop Impact (23°C)	5.42	J	ASTM D3029
Tensile Impact Strength ⁵	63.0	kJ/m ²	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, unannealed, 6.40mm	149	°C	ASTM D648

1.8 MPa, unannealed, 6.40mm	146	°C	ASTM D648
Vicat Softening Temperature	166	°C	ASTM D1525 ⁶
CLTE - Flow (-40 to 95°C)	2.7E-5	cm/cm/°C	ASTM E831
Specific Heat	1170	J/kg/°C	ASTM C351
Thermal Conductivity	0.21	W/m/K	ASTM C177
RTI Elec	130	°C	UL 746
RTI Imp	130	°C	UL 746
RTI	130	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+17	ohms · cm	ASTM D257
Dielectric Strength (3.20 mm, in Air)	19	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
50 Hz	3.17		ASTM D150
60 Hz	3.17		ASTM D150
1 MHz	3.13		ASTM D150
Dissipation Factor			ASTM D150
50 Hz	9.0E-4		ASTM D150
60 Hz	9.0E-4		ASTM D150
1 MHz	7.3E-3		ASTM D150
Arc Resistance ⁷	PLC 7		ASTM D495
Comparative Tracking Index (CTI)	PLC 5		UL 746
High Amp Arc Ignition (HAI)	PLC 4		UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 3		UL 746
Hot-wire Ignition (HWI)	PLC 0		UL 746
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.47 mm	V-1		UL 94
	V-0		
3.00 mm	5VA		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	3.0 - 4.0	hr	
Drying Time, Maximum	48	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 - 60	%	
Rear Temperature	293 - 316	°C	
Middle Temperature	304 - 327	°C	
Front Temperature	316 - 338	°C	
Nozzle Temperature	310 - 332	°C	
Processing (Melt) Temp	316 - 338	°C	

Mold Temperature	82.2 - 116	°C
Back Pressure	0.345 - 0.689	MPa
Screw Speed	40 - 70	rpm
Vent Depth	0.025 - 0.076	mm

NOTE		
1.	Type 1, 5.0 mm/min	
2.	Type 1, 5.0 mm/min	
3.	1.3 mm/min	
4.	1.3 mm/min	
5.	Type S	
6.	标准 B (120°C/h), 载荷2 (50N)	
7.	Tungsten electrode	

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