

LEXAN™ 3412R resin

聚碳酸酯

SABIC Innovative Plastics Asia Pacific



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Technical Data

产品说明

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

总体

材料状态	• 已商用：当前有效
资料 ¹	• Technical Datasheet
UL 黄卡 ²	• E45587-236874 • E207780-228393
搜索 UL 黄卡	• SABIC Innovative Plastics Asia Pacific • LEXAN™
供货地区	• 亚太地区
填料/增强材料	• 玻璃纤维增强材料, 20% 填料按重量
添加剂	• 脱模
加工方法	• 注射成型

物理性能	额定值 (英制)	额定值 (公制)	测试方法
比重			ASTM D792
--	1.35	1.35 g/cm ³	
--	1.36 g/cm ³	1.36 g/cm ³	
特定体积	20.5 in ³ /lb	0.741 cm ³ /g	ASTM D792
熔流率 (300°C/1.2 kg)	4.3 g/10 min	4.3 g/10 min	ASTM D1238
收缩率 - 流动 (0.126 in (3.20 mm))	0.0010 到 0.0030 in/in	0.10 到 0.30 %	Internal Method
吸水率			ASTM D570
24 hr	0.16 %	0.16 %	
平衡, 73°F (23°C)	0.29 %	0.29 %	
机械性能	额定值 (英制)	额定值 (公制)	测试方法
抗张强度 ⁴ (断裂)	16000 psi	110 MPa	ASTM D638
伸长率 ⁴ (断裂)	5.0 %	5.0 %	ASTM D638
弯曲模量 ⁵ (1.97 in (50.0 mm) 跨距)	800000 psi	5520 MPa	ASTM D790
弯曲强度 ⁵ (屈服, 1.97 in (50.0 mm) 跨距)	19000 psi	131 MPa	ASTM D790
抗泰伯磨损 (1000 Cycles, 1000 g, CS-17 转轮)	17.0 mg	17.0 mg	ASTM D1044
冲击性能	额定值 (英制)	额定值 (公制)	测试方法
悬臂梁缺口冲击强度 (73°F (23°C))	2.0 ft-lb/in	110 J/m	ASTM D256
无缺口悬臂梁冲击 (73°F (23°C))	19 ft-lb/in	1000 J/m	ASTM D4812
落锤冲击 (73°F (23°C))	48.0 in-lb	5.42 J	ASTM D3029
拉伸冲击强度 ⁶	30.0 ft-lb/in ²	63.0 kJ/m ²	ASTM D1822
硬度	额定值 (英制)	额定值 (公制)	测试方法
洛氏硬度			ASTM D785
M 计秤	91	91	
R 计秤	122	122	
热性能	额定值 (英制)	额定值 (公制)	测试方法
热变形温度			ASTM D648
66 psi (0.45 MPa), 未退火, 0.252 in (6.40 mm)	300 °F	149 °C	
264 psi (1.8 MPa), 未退火, 0.252 in (6.40 mm)	295 °F	146 °C	
维卡软化温度	330 °F	166 °C	ASTM D1525 ⁷
线形膨胀系数 - 流动 (-40 到 203°F (-40 到 95°C))	0.000015 in/in/°F	0.000027 cm/cm/°C	ASTM E831
比热	0.280 Btu/lb/°F	1170 J/kg/°C	ASTM C351
导热系数	1.5 Btu-in/hr/ft ² /°F	0.21 W/m/K	ASTM C177
RTI Elec	266 °F	130 °C	UL 746
RTI Imp	266 °F	130 °C	UL 746

热性能	额定值 (英制)	额定值 (公制)	测试方法
RTI Str	266 °F	130 °C	UL 746
电气性能	额定值 (英制)	额定值 (公制)	测试方法
体积电阻率	> 1.0E+17 ohm·cm	> 1.0E+17 ohm·cm	ASTM D257
介电强度 (0.126 in (3.20 mm), in Air)	490 V/mil	19 kV/mm	ASTM D149
介电常数			ASTM D150
50 Hz	3.17	3.17	
60 Hz	3.17	3.17	
1 MHz	3.13	3.13	
耗散因数			ASTM D150
50 Hz	0.00090	0.00090	
60 Hz	0.00090	0.00090	
1 MHz	0.0073	0.0073	
耐电弧性 ⁸	PLC 7	PLC 7	ASTM D495
相比耐漏电起痕指数(CTI)	PLC 5	PLC 5	UL 746
高电弧燃烧指数(HAI)	PLC 4	PLC 4	UL 746
高电压电弧起痕速率 (HVTR)	PLC 3	PLC 3	UL 746
热丝引燃 (HWI)	PLC 0	PLC 0	UL 746
可燃性	额定值 (英制)	额定值 (公制)	测试方法
UL 阻燃等级			UL 94
0.0580 in (1.47 mm)	V-1	V-1	
0.118 in (3.00 mm)	• V-0 • 5VA	• V-0 • 5VA	
注射	额定值 (英制)	额定值 (公制)	
干燥温度	250 °F	121 °C	
干燥时间	3.0 到 4.0 hr	3.0 到 4.0 hr	
干燥时间，最大	48 hr	48 hr	
建议的最大水分含量	0.020 %	0.020 %	
建议注入量	40 到 60 %	40 到 60 %	
螺筒后部温度	560 到 600 °F	293 到 316 °C	
螺筒中部温度	580 到 620 °F	304 到 327 °C	
螺筒前部温度	600 到 640 °F	316 到 338 °C	
射嘴温度	590 到 630 °F	310 到 332 °C	
加工 (熔体) 温度	600 到 640 °F	316 到 338 °C	
模具温度	180 到 240 °F	82.2 到 116 °C	
背压	50.0 到 100 psi	0.345 到 0.689 MPa	
螺杆转速	40 到 70 rpm	40 到 70 rpm	
排气孔深度	0.0010 到 0.0030 in	0.025 到 0.076 mm	

备注

¹ 通过这些链接您能够访问供应商资料。我们尽量保证及时更新资料；不过您可以从供应商处了解最新资料。

² UL 黄卡含有 UL 验证的易燃性和电气特性。UL IDES 持续努力在 Prospector 中将黄卡链接至单个塑料材料，然而此列表可能未包括所有相应链接。重要的是，我们对 Prospector 中找到的这些黄卡和塑料材料之间的关联进行验证。如需完整的黄卡列表，请访问 UL 黄卡搜索。

³ 一般属性：这些不能被视为规格。

⁴ 类型 1, 0.20 in/min (5.0 mm/min)

⁵ 0.051 in/min (1.3 mm/min)

⁶ Type S

⁷ 标准 B (120°C/h), 压 力2 (50N)

⁸ 钨电极

购买地点

供应商

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分销商

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– Kevin Chase, Owner & President, Chase Plastics



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