



Rynite® FR530 BK507

THERMOPLASTIC POLYESTER RESIN

Rynite® 热塑性聚酯的共性包括良好的机械和物理性能，例如强度和刚性之间良好的平衡、尺寸稳定性、耐蠕变、耐热老化、高表面光泽和固有地高温下良好的电气性能。可在很宽泛的温度范围内加工，有很好的流动性能。
Rynite® 热塑性聚酯通常应用于要求严苛的汽车、电子电器工业，成功取代金属、热固性材料和其他热塑性聚合物。

Rynite® FR530 BK507是一种30% 玻纤增强, 阻燃, PET

总说明

树脂鉴别	PET-GF30FR(17)	ISO 1043
制品标识码	>PET-GF30FR(17)<	ISO 11469

流变性能

模塑收缩率, 平行	0.2 %	ISO 294-4, 2577
模塑收缩率, 垂直	0.8 %	ISO 294-4, 2577

机械性能

拉伸模量	11300 MPa	ISO 527-1/-2
断裂应力	130 MPa	ISO 527-1/-2
断裂伸长率	1.9 %	ISO 527-1/-2
弯曲模量	10500 MPa	ISO 178
弯曲强度	200 MPa	ISO 178
简支梁无缺口冲击强度, +23°C	40 kJ/m ²	ISO 179/1eU
简支梁无缺口冲击强度, -40°C	30 kJ/m ²	ISO 179/1eU
简支梁缺口冲击强度, +23°C	9 kJ/m ²	ISO 179/1eA
简支梁缺口冲击强度, -40°C	8 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 -	

热性能

熔融温度, 10°C/min	252 °C	ISO 11357-1/-3
玻璃化转变温度, 10°C/min	90 °C	ISO 11357-1/-2
热变形温度, 1.80 MPa	220 °C	ISO 75-1/-2
热变形温度, 0.45 MPa	243 °C	ISO 75-1/-2
球压测试	230 °C	IEC 60695-10-2
线性热膨胀系数, 平行, -40-23°C	19 E-6/K	ISO 11359-1/-2
线膨胀系数, 平行	22 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 平行, 55-160°C	17 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 垂直, -40-23°C	68 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直	96 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直, 55-160°C	125 E-6/K	ISO 11359-1/-2
相对温度指数, 电气性能, 0.4mm	155 °C	UL 746B
相对温度指数, 电气性能, 0.75mm	155 °C	UL 746B
相对温度指数, 电气性能, 1.5mm	155 °C	UL 746B



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相对温度指数, 电气性能, 3mm	155 °C	UL 746B
相对温度指数, 冲击, 0.4mm	155 °C	UL 746B
相对温度指数, 冲击, 0.75mm	155 °C	UL 746B
相对温度指数, 冲击, 1.5mm	155 °C	UL 746B
相对温度指数, 冲击, 3mm	155 °C	UL 746B
相对温度指数, 强度, 0.4mm	155 °C	UL 746B
相对温度指数, 强度, 0.75mm	155 °C	UL 746B
相对温度指数, 强度, 1.5mm	155 °C	UL 746B
相对温度指数, 强度, 3mm	155 °C	UL 746B

燃烧性能

1.5mm名义厚度时的燃烧性	V-0 class	IEC 60695-11-10
测试用试样的厚度	1.5 mm	IEC 60695-11-10
UL注册	yes -	UL 94
厚度为h时的燃烧性	V-0 class	IEC 60695-11-10
测试用试样的厚度	0.35 mm	IEC 60695-11-10
UL注册	yes -	UL 94
厚度为h时的5V燃烧性	5VA class	IEC 60695-11-20
测试用试样的厚度	1.5 mm	IEC 60695-11-20
UL注册	yes -	UL 94
燃烧性 - 氧指数	33 %	ISO 4589-1/-2
灼热丝燃烧指数, 0.75mm	960 °C	IEC 60695-2-12
灼热丝燃烧指数, 1mm	960 °C	IEC 60695-2-12
灼热丝燃烧指数, 1.5mm	960 °C	IEC 60695-2-12
灼热丝燃烧指数, 2mm	960 °C	IEC 60695-2-12
灼热丝燃烧指数, 3mm	960 °C	IEC 60695-2-12
灼热丝起燃温度, 0.75mm	800 °C	IEC 60695-2-13
灼热丝起燃温度, 1.5mm	800 °C	IEC 60695-2-13
灼热丝起燃温度, 2mm	850 °C	IEC 60695-2-13
灼热丝起燃温度, 3mm	925 °C	IEC 60695-2-13
FMVSS Class	DNI -	ISO 3795 (FMVSS 302)
Railway classification	R23 -	EN 45545-2
Railway classification rating	HL1 -	EN 45545-2

电性能

相对介电常数., 100Hz	4.1 -	IEC 62631-2-1
相对介电常数., 1MHz	3.7 -	IEC 62631-2-1
介质损耗因子, 100Hz	309 E-4	IEC 62631-2-1
介质损耗因子, 1MHz	127 E-4	IEC 62631-2-1
体积电阻率	>1E13 Ohm.m	IEC 62631-3-1
表面电阻率	1E14 Ohm	IEC 62631-3-2
介电强度	39 ^[DS] kV/mm	IEC 60243-1
相对漏电起痕指数	200 -	IEC 60112
相对漏电起痕指数	2 PLC	UL 746A

[DS]: Derived from similar grade



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其它性能

吸湿性, 2mm	0.15 ^[DS] %	类似ISO 62
吸水性, 2mm	0.75 ^[DS] %	类似ISO 62
密度	1680 kg/m ³	ISO 1183

[DS]: Derived from similar grade

注塑

建议干燥	是
干燥温度	120 °C
干燥时间, 除湿干燥机	4 - 6 h
加工前水分含量	≤ 0.02 ^[1] %
优良熔体温度	280 °C
注塑 熔体温度	270 °C
注塑 熔体温度	290 °C
螺杆大的切线速度	0.2 m/s
优良模具温度	110 °C
模具温度	100 °C
模具温度	120 ^[2] °C
保压范围	≥ 80 MPa
保压时间	4 s/mm
背压	As low as possible MPa
喷射温度	170 °C

[1]: At levels above 0.02%, strength and toughness will decrease, even though parts may not exhibit surface defects.

[2]: (6mm - 1mm thickness)

典型数据

添加剂	阻燃剂
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