



Crastin® FR684NH1 NC010 (PRELIMINARY)

THERMOPLASTIC POLYESTER RESIN

Crastin® FR684NH1 is a 25% Glass Reinforced, Flame Retardant, Non-Halogenated, Polybutylene Terephthalate

总说明

树脂鉴别	PBT-GF25FR(40)	ISO 1043
制品标识码	>PBT-GF25FR(40)<	ISO 11469

流变性能

模塑收缩率, 平行	0.5 %	ISO 294-4, 2577
模塑收缩率, 垂直	1.2 %	ISO 294-4, 2577
流动长度	280 mm	
流动长度-压力	110 MPa	
流动长度-宽厚比	2 mm	

机械性能

拉伸模量	9400 MPa	ISO 527-1/-2
断裂应力	95 MPa	ISO 527-1/-2
断裂伸长率	2.5 %	ISO 527-1/-2
简支梁无缺口冲击强度, +23°C	43 kJ/m ²	ISO 179/1eU
简支梁无缺口冲击强度, -30°C	46 kJ/m ²	ISO 179/1eU
简支梁缺口冲击强度, +23°C	7.5 kJ/m ²	ISO 179/1eA
简支梁缺口冲击强度, -30°C	6.8 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.34 -	

热性能

熔融温度, 10°C/min	223 °C	ISO 11357-1/-3
玻璃化转变温度, 10°C/min	55 °C	ISO 11357-1/-2
热变形温度, 1.80 MPa	205 °C	ISO 75-1/-2
球压测试	220 °C	IEC 60695-10-2
线性热膨胀系数, 平行, -40-23°C	23 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 平行, 23-55°C	29 E-6/K	ASTM E 831
线性热膨胀系数, 平行, 55-160°C	20 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 垂直, -40-23°C	66 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直, 23-55°C	122 E-6/K	ASTM E 831
线膨胀系数, 垂直, 55-160°C	127 E-6/K	ISO 11359-1/-2
相对温度指数, 电气性能, 0.75mm	130 °C	UL 746B
相对温度指数, 电气性能, 1.5mm	130 °C	UL 746B
相对温度指数, 电气性能, 3mm	130 °C	UL 746B
相对温度指数, 冲击, 0.75mm	125 °C	UL 746B
相对温度指数, 冲击, 1.5mm	125 °C	UL 746B
相对温度指数, 冲击, 3mm	125 °C	UL 746B
相对温度指数, 强度, 0.75mm	140 °C	UL 746B



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相对温度指数, 强度, 1.5mm	140 °C	UL 746B
相对温度指数, 强度, 3mm	140 °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	0.75 mm	IEC 60695-11-10
UL注册	yes -	UL 94
燃烧性 - 氧指数	40 %	ISO 4589-1/-2
灼热丝燃烧指数, 0.4mm	960 °C	IEC 60695-2-12
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, 3mm	960 °C	IEC 60695-2-12
灼热丝起燃温度, 0.75mm	750 °C	IEC 60695-2-13
灼热丝起燃温度, 0.4mm	750 °C	IEC 60695-2-12
灼热丝起燃温度, 1mm	750 °C	IEC 60695-2-13
灼热丝起燃温度, 1.5mm	750 °C	IEC 60695-2-13
灼热丝起燃温度, 3mm	800 °C	IEC 60695-2-13
Railway classification	R22 -	EN 45545-2
Railway classification rating	HL1 -	EN 45545-2

电性能

体积电阻率	>1E13 Ohm.m	IEC 62631-3-1
表面电阻率	>1E15 Ohm	IEC 62631-3-2
介电强度	42 kV/mm	IEC 60243-1
相对漏电起痕指数	600 -	IEC 60112
相对漏电起痕指数	PLC	UL 746A

其它性能

吸湿性, 2mm	0.1 ^[DS] %	类似ISO 62
吸水性, 2mm	0.25 ^[DS] %	类似ISO 62
密度	1520 kg/m ³	ISO 1183

[DS]: Derived from similar grade

VDA性能

有机化合物的排放	39 □ gC/g	VDA 277
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注塑

建议干燥	是
干燥温度	120 °C
干燥时间, 除湿干燥机	2 - 4 h
加工前水分含量	≤ 0.04 %
优良熔体温度	250 °C
注塑 熔体温度	240 °C
注塑 熔体温度	260 °C
优良模具温度	80 °C
模具温度	30 °C
模具温度	130 °C
保压范围	≥ 60 MPa
保压时间	3 s/mm
背压	As low as possible MPa
喷射温度	170 °C

典型数据

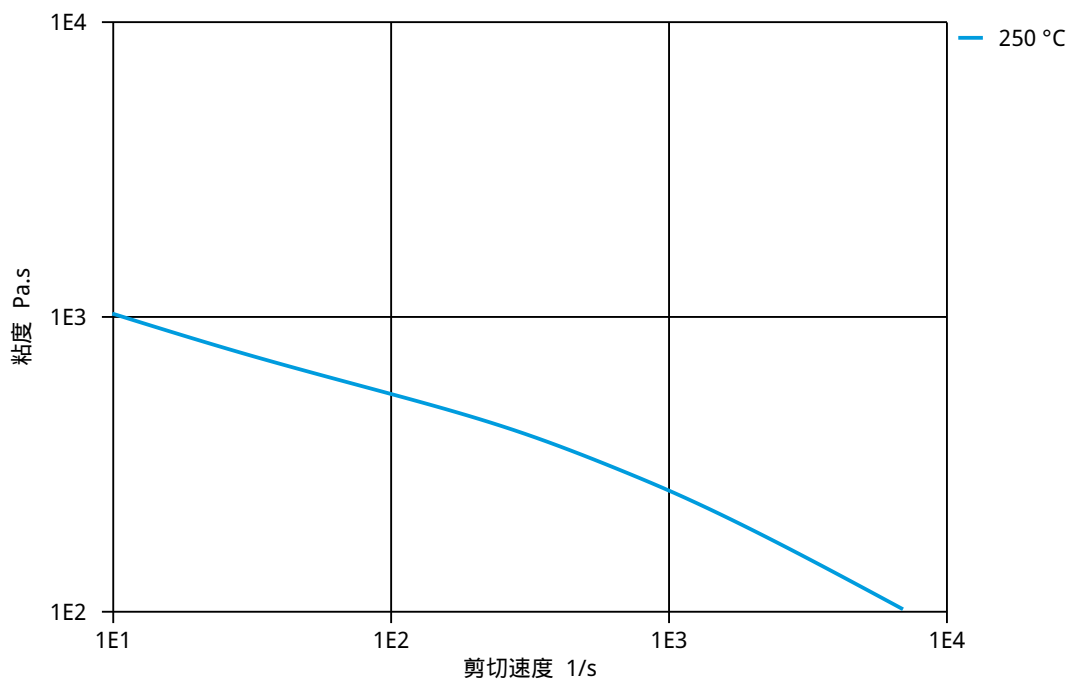
添加剂 阻燃剂, 无卤无磷阻燃或固有阻燃



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粘度 - 剪切速度

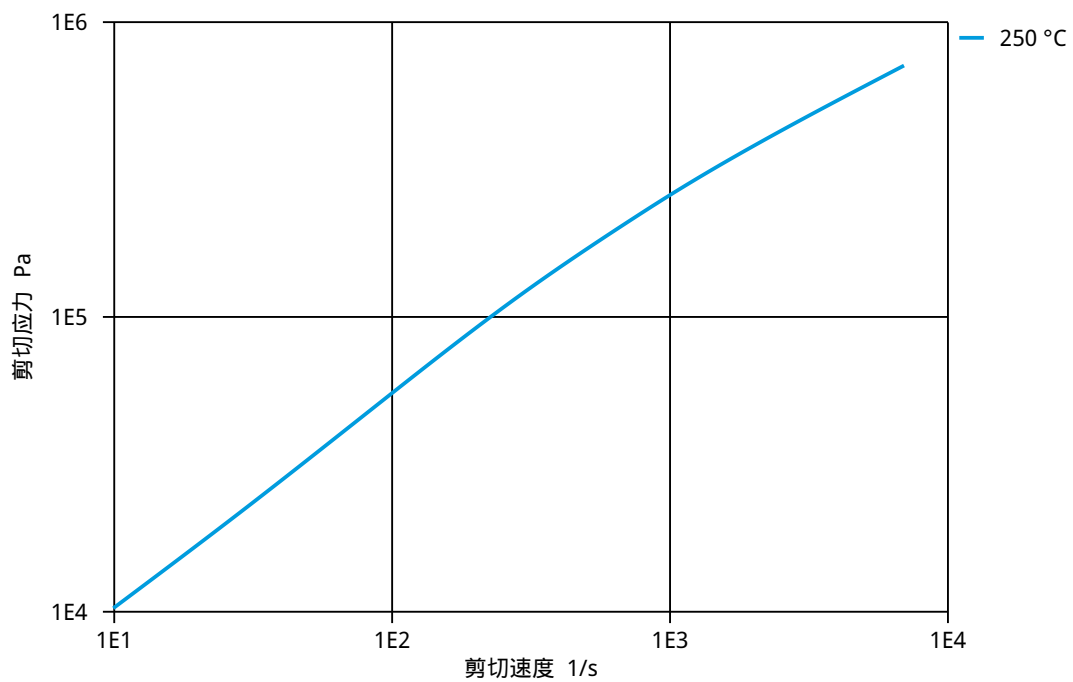




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剪切应力 - 剪切速度

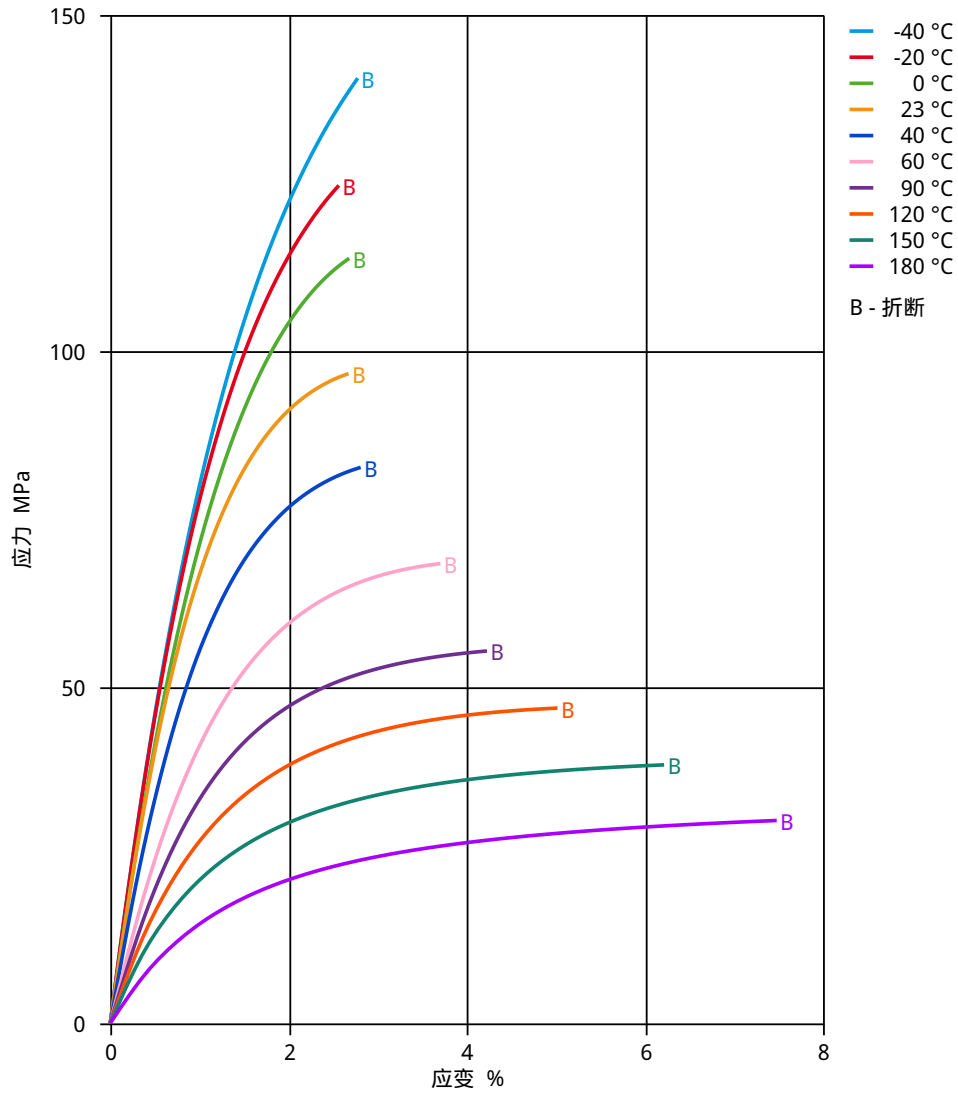




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应力 - 应变.

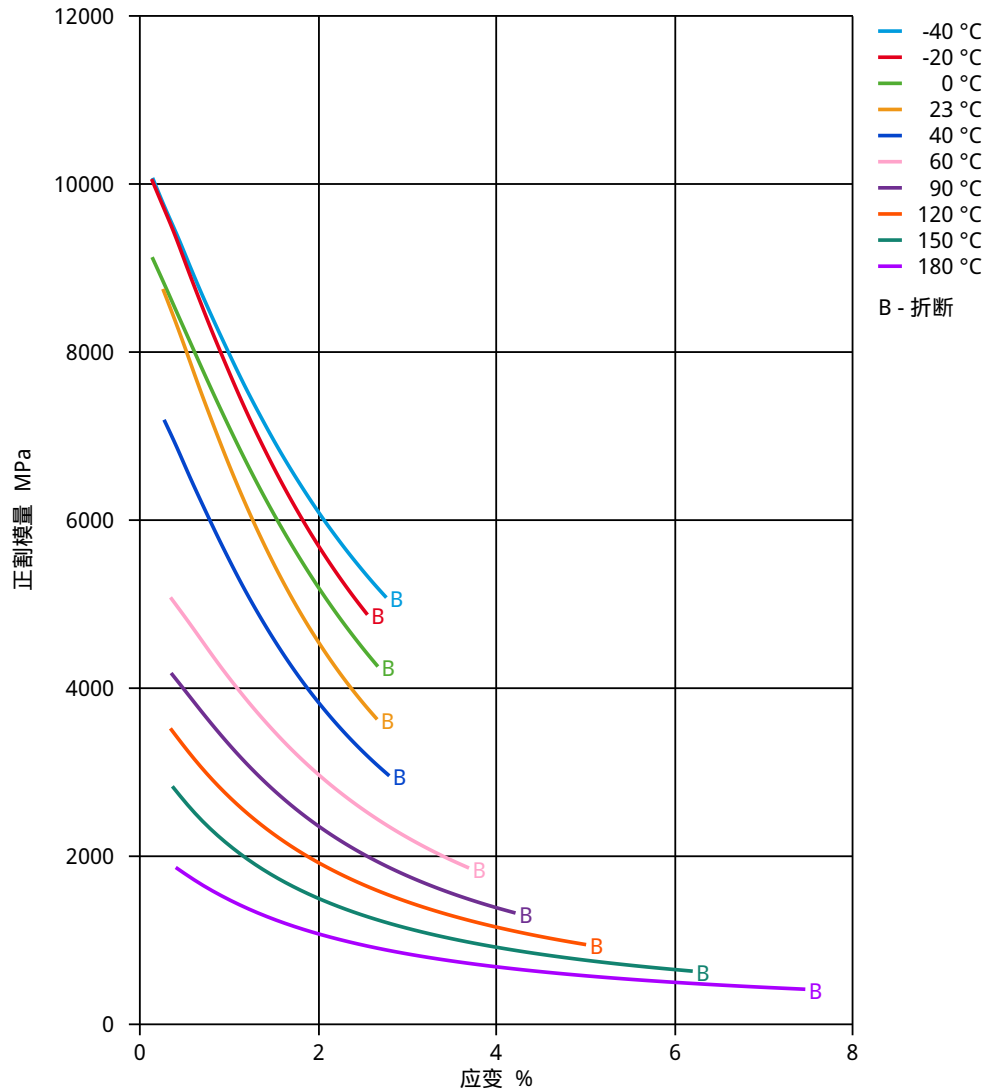




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正割模量 - 应变.



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