Zytel® HTNWRF51G30 NC010 (PRELIMINARY)

HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTNWRF51G30 NC010是一种30% 玻纤增强, 高温尼龙, PTFE润滑, 具有低磨耗和低摩擦性能高性能聚酰胺

产品信息

树脂鉴别	PA6T/XT-GF30 SD		ISO 1043
制品标识码	>PA6T/XT-GF30 SD<		ISO 11469
ISO名称	ISO 16396-PA6T/XT,GF30,M1GHNRS,S10-100		
红外谱图	available		
TGA曲线	available		ISO 11358-1

流变性能

	dry/cond.		
模塑收缩率, 平行	0.2/-	%	ISO 294-4, 2577
模塑收缩率, 垂直	0.7/-	%	ISO 294-4, 2577

机械性能

	dry/cond.		
拉伸模量	10000/10000	MPa	ISO 527-1/-2
拉伸断裂应力, 5mm/min	190/173	MPa	ISO 527-1/-2
断裂伸长率, 5mm/min	2.6/2.2	%	ISO 527-1/-2
弯曲模量	9300/-	MPa	ISO 178
简支梁无缺口冲击强度, 23°C	65/-	kJ/m²	ISO 179/1eU
简支梁缺口冲击强度, 23°C	11/-	kJ/m²	ISO 179/1eA
简支梁缺口冲击强度, -30°C	9/-	kJ/m²	ISO 179/1eA

Tribological properties

	dry/cond.		
滑动摩擦系数, 1h, 钢	-/0.25		ASTM 1894

热性能

	dry/cond.		
熔融温度, 10°C/min	300/*	°C	ISO 11357-1/-3
玻璃化转变温度, 10°C/min	140/90	°C	ISO 11357-1/-3
热变形温度, 1.8 MPa	260/*	°C	ISO 75-1/-2
线性热膨胀系数, 平行	15/*	E-6/K	ISO 11359-1/-2
线性热膨胀系数, 平行，-40-23°C	16/*	E-6/K	ISO 11359-1/-2
线性热膨胀系数, 垂直	60/*	E-6/K	ISO 11359-1/-2
线性热膨胀系数, 垂直，-40-23°C	53/*	E-6/K	ISO 11359-1/-2
熔体导热系数	0.23	W/(m K)	ISO 22007-2
熔体比热容	1740	J/(kg K)	ISO 22007-4

阻燃性能

FMVSS Class	DNI	ISO 3795 (FMVSS 302)

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电性能

	dry/cond.		
相对漏电起痕指数	550/-		IEC 60112

其它性能

	dry/cond.		
吸湿率, 2mm	2.3/*	%	类似ISO 62
吸水率, 浸泡 24小时	0.5[1]/*	%	类似ISO 62
密度	1560/-	kg/m³	ISO 1183
熔体密度	1350	kg/m³	

[1]: 2mm thickness

注塑

建议干燥	是	
干燥温度	100	°C
干燥时间，除湿干燥机	6 - 8	h
加工前水分含量	≤ 0.1	%
最优熔体温度	325	°C
最低熔体温度***	320	°C
最高熔体温度	330	°C
最优模具温度	150	°C
最低模具温度	140	°C
最高模具温度	160	°C
保压时间 (h表示部件的最大壁厚mm)	h²+2	s
顶出温度	259	°C

特性

加工方法	注塑
添加剂	脱模助剂
特殊性能	热稳定, 低磨损/低摩擦

其他信息

注塑

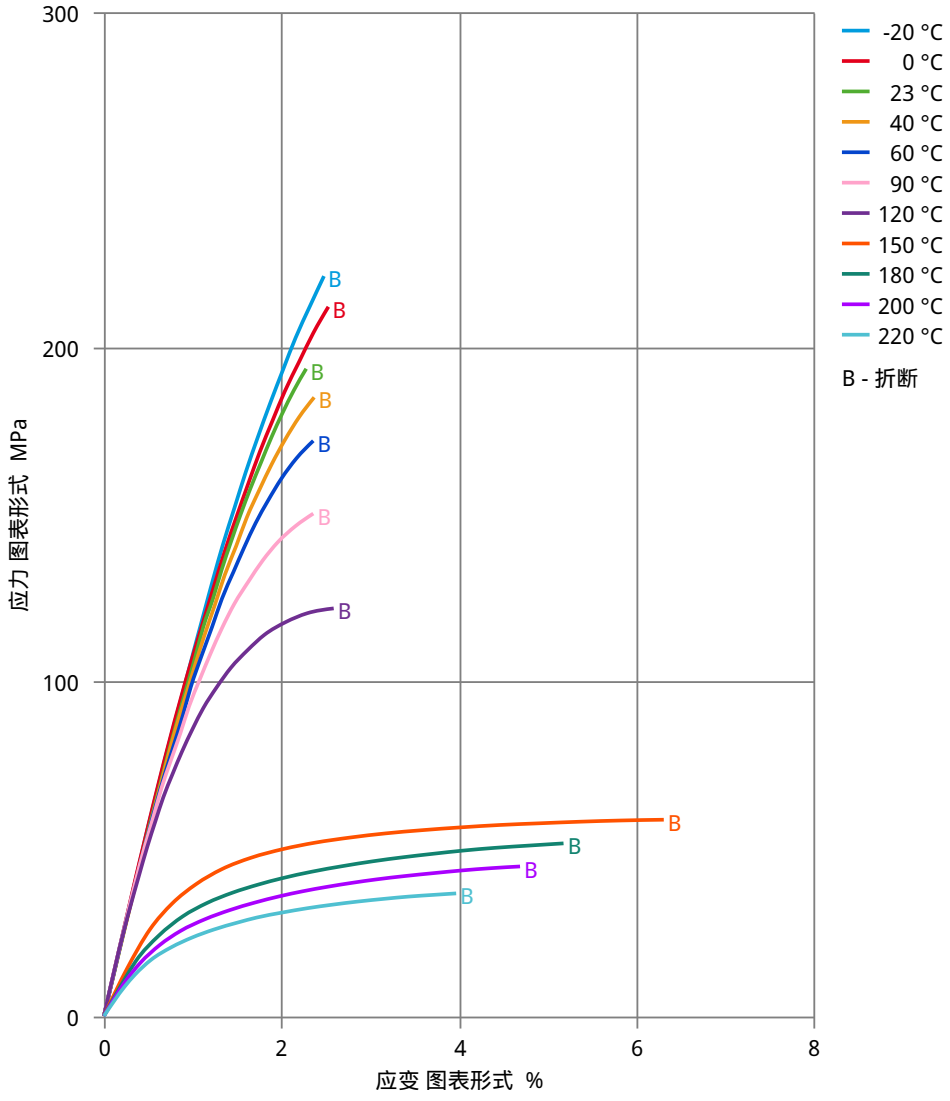
During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

When lower mold temperatures are used, the initial warpage and shrinkage may be lower, but the surface appearance and chemical resistance may be reduced, and the dimensional change may be greater when parts are subsequently heated.

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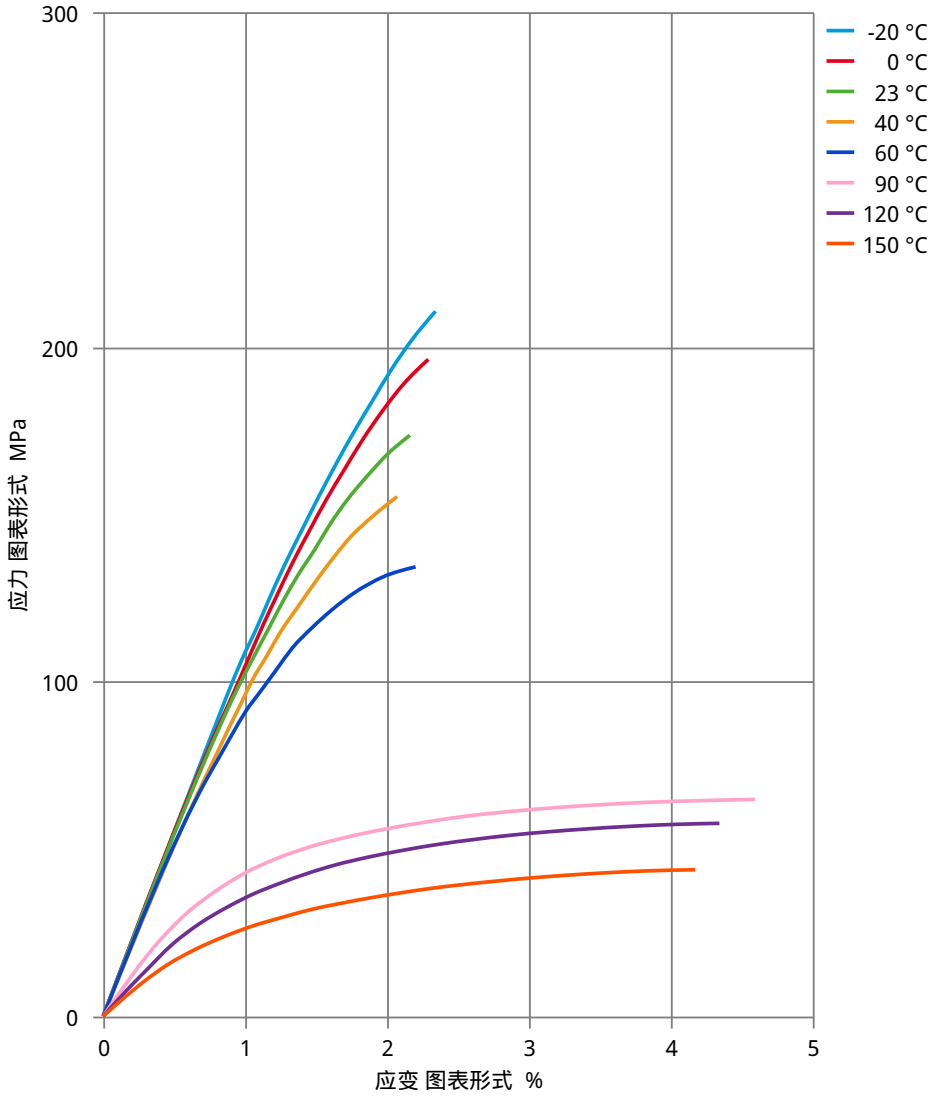
应力 - 应变 (dry)



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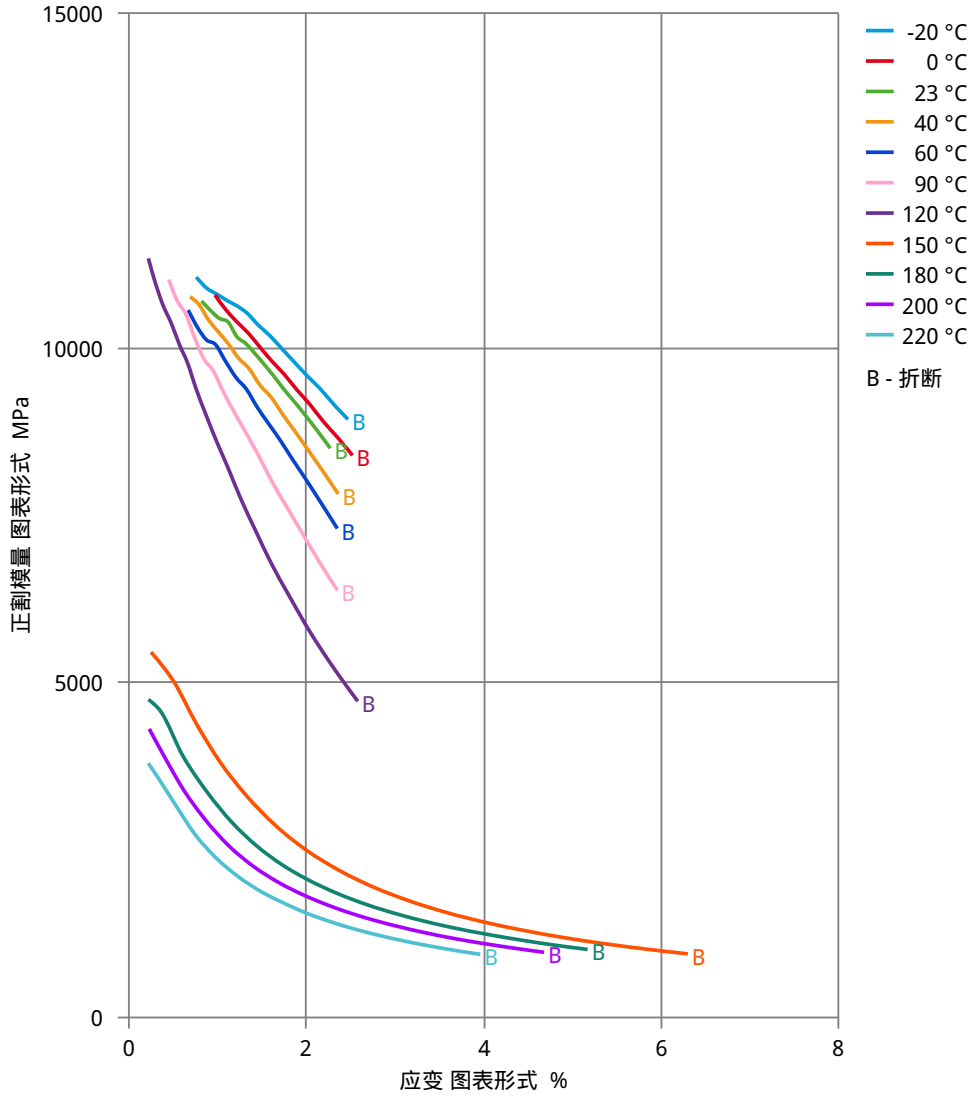
应力 - 应变 (cond.)



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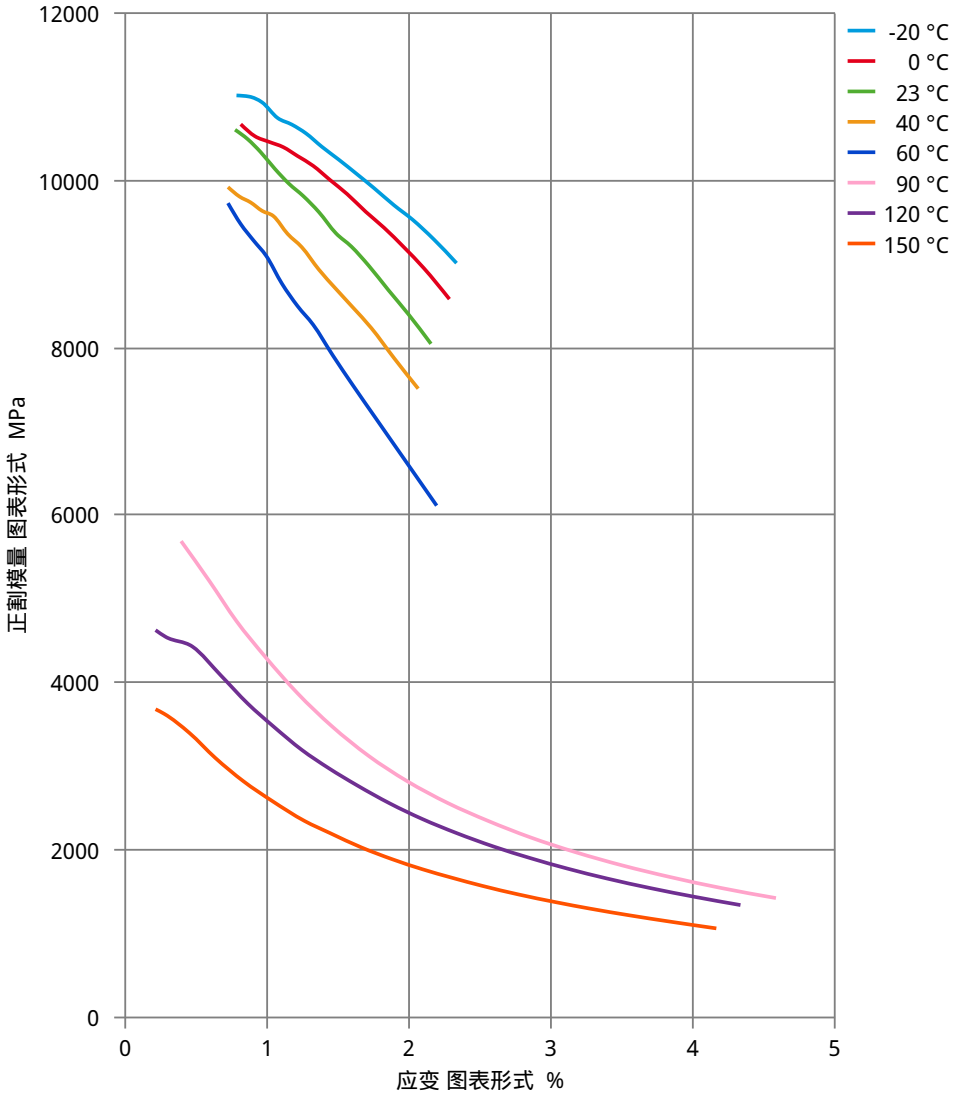
正割模量 - 应变 (dry)



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正割模量 - 应变 (cond.)



Revised: 2025-07-08 Source: Celanese Materials Database

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.
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