

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, 具有低磨损和低摩擦性能高性能聚酰胺

总说明

树脂鉴别	PA6T/XT- GF30SD	ISO 1043
制品标识码	>PA6T/XT-GF30SD<	ISO 11469
ISO名称	ISO 16396-PA6T/XT,GF30,M1GHNRS,S10-100	

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
断裂应力, 5mm/min	190/170	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/m ²	ISO 179/1eU
简支梁缺口冲击强度, +23°C	11/-	kJ/m ²	ISO 179/1eA
简支梁缺口冲击强度, -30°C	9/-	kJ/m ²	ISO 179/1eA
泊松比	0.34/0.34		

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, 1.80 MPa	260/*	°C	ISO 75-1/-2
线性热膨胀系数, 平行, -40-23°C	16/*	E-6/K	ISO 11359-1/-2
线膨胀系数, 平行	15/*	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
线膨胀系数, 垂直	60/*	E-6/K	ISO 11359-1/-2
熔体导热系数	0.23	W/(m K)	ISO 22007-2
熔体的比热容	1740	J/(kg K)	ISO 22007-4
TGA曲线	available		ISO 11359-1/-2

燃烧性能

FMVSS Class	DNI	ISO 3795 (FMVSS 302)
-------------	-----	----------------------

Zytel® HTNWRF51G30 NC010 (PRELIMINARY)

HIGH PERFORMANCE POLYAMIDE RESIN

电性能

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

其它性能

	dry/cond.		
密度	1560/-	kg/m ³	ISO 1183
熔体密度	1350	kg/m ³	

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
注塑 熔体温度	320 °C
注塑 熔体温度	330 °C
最优模具温度	150 °C
模具温度	140 °C
模具温度	160 °C
顶出温度	259 °C

典型数据

添加剂 脱模助剂

成型

注塑

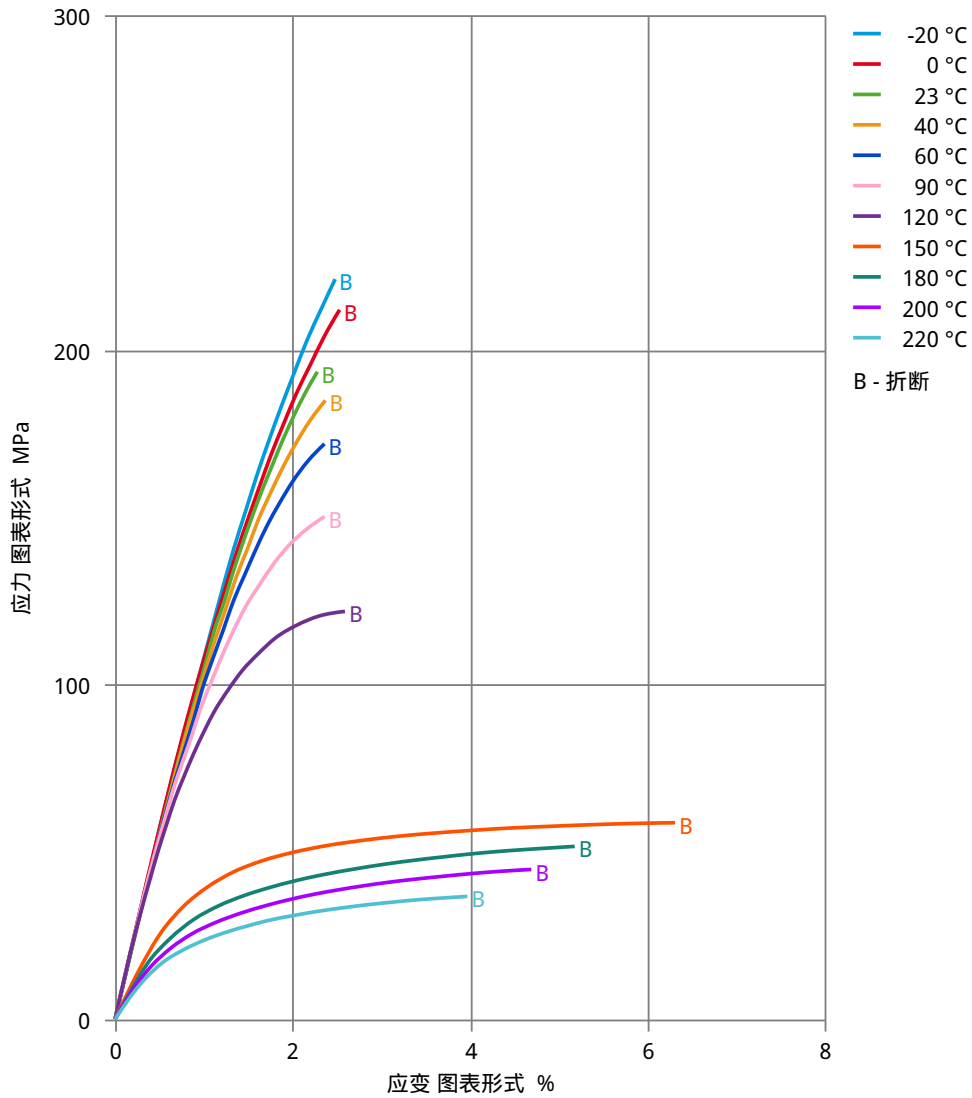
During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

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.

Zytel® HTNWRF51G30 NC010 (PRELIMINARY)

HIGH PERFORMANCE POLYAMIDE RESIN

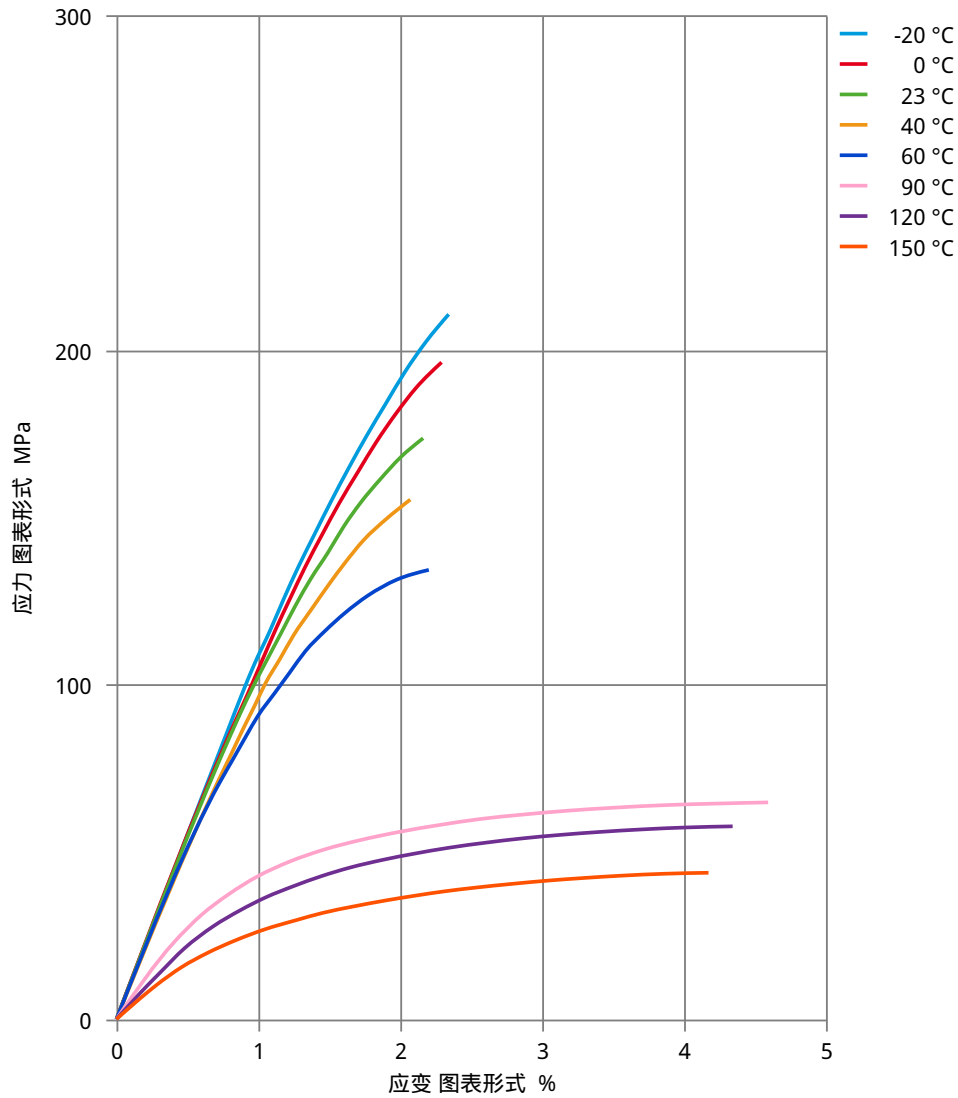
应力 - 应变. (dry)



Zytel® HTNWRF51G30 NC010 (PRELIMINARY)

HIGH PERFORMANCE POLYAMIDE RESIN

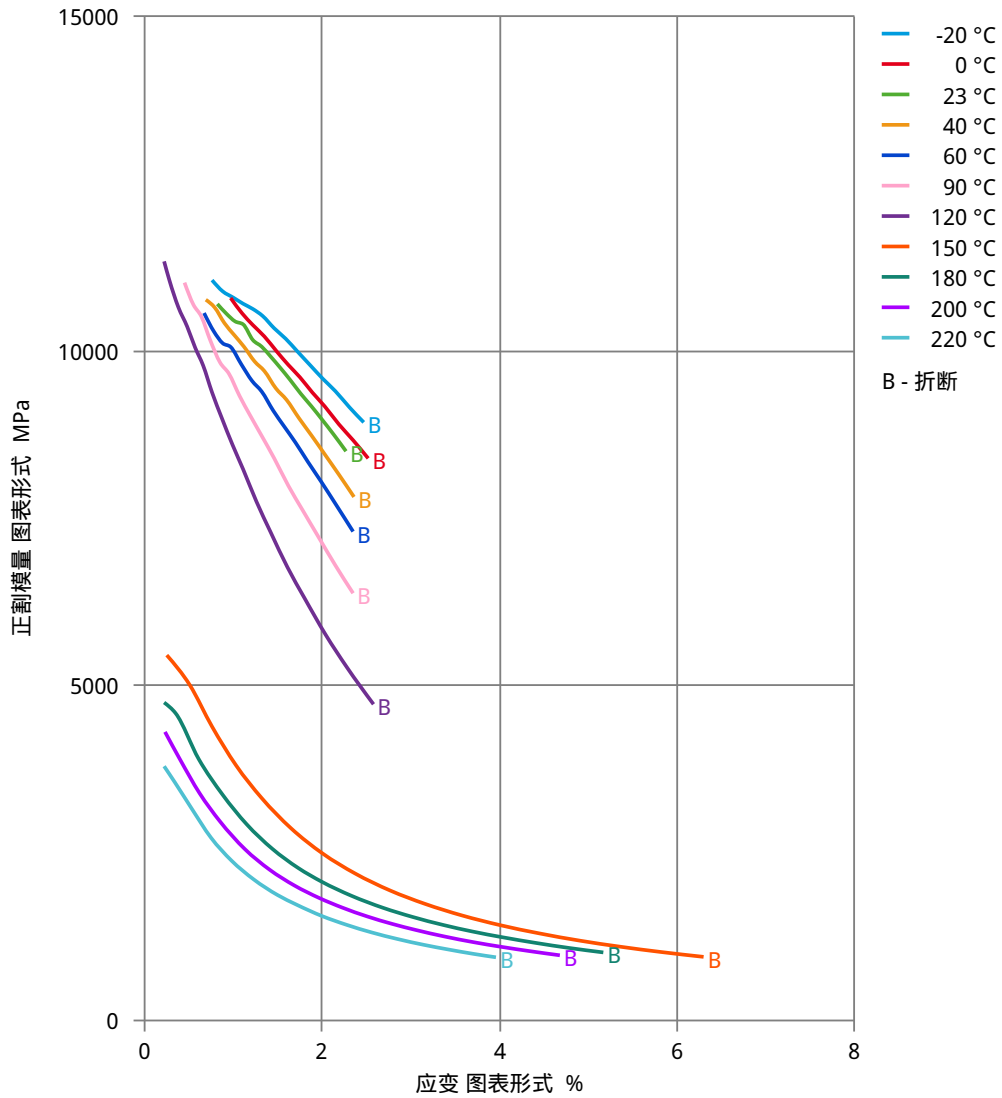
应力 - 应变. (cond.)



Zytel® HTNWRF51G30 NC010 (PRELIMINARY)

HIGH PERFORMANCE POLYAMIDE RESIN

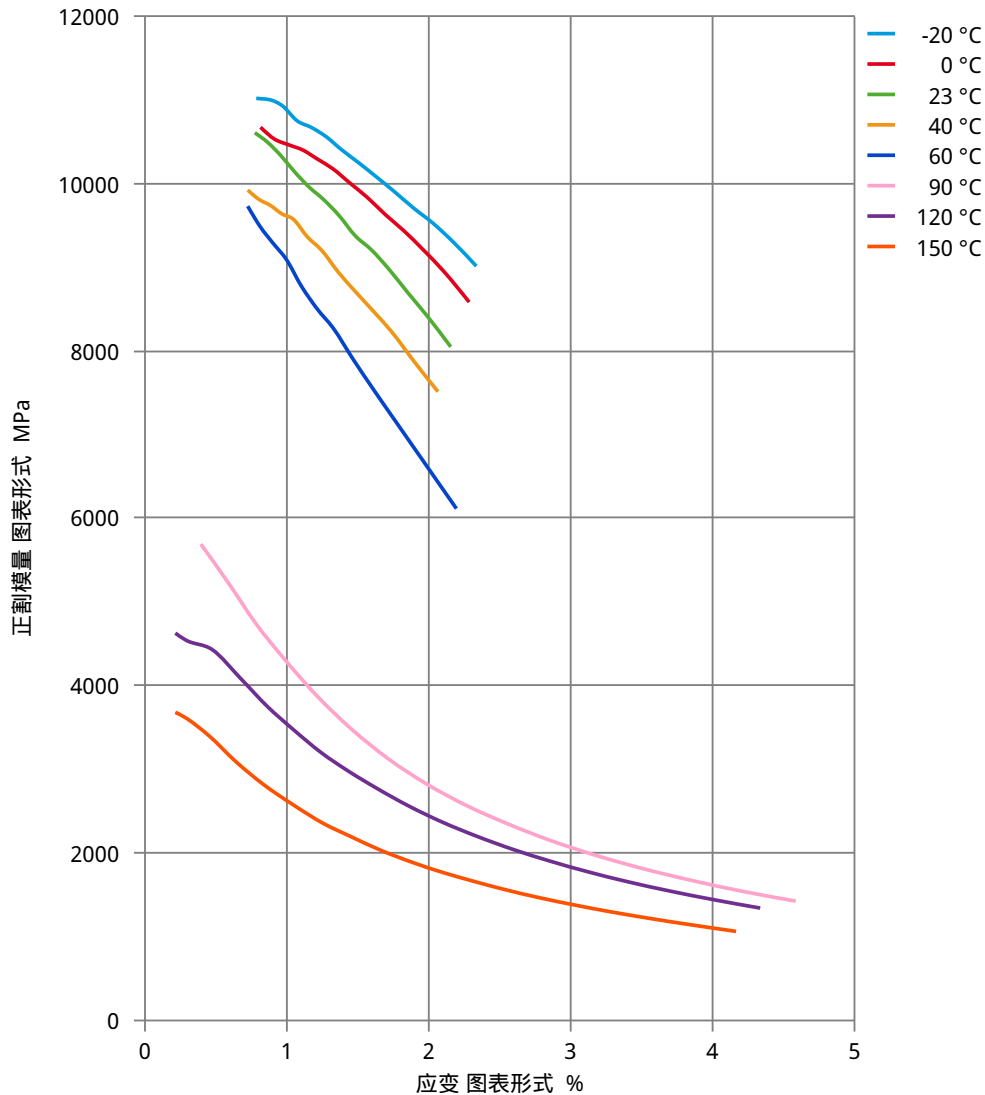
正割模量 - 应变. (dry)



Zytel® HTNWRF51G30 NC010 (PRELIMINARY)

HIGH PERFORMANCE POLYAMIDE RESIN

正割模量 - 应变. (cond.)



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

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

© 2024 Celanese or its affiliates. All rights reserved. Celanese®, registered C-ball design and all other trademarks identified herein with ®, TM, SM, unless otherwise noted, are trademarks of Celanese or its affiliates. Fortron is a registered trademark of Fortron Industries LLC. KEPITAL is a registered trademark of Korea Engineering Plastics Company, Ltd.