



Rynite® 415HP NC010

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® 415HP NC010是一种15% 玻纤增强 PET具有优异的抗冲击性

总说明

树脂鉴别	PET-IGF15	ISO 1043
制品标识码	>PET-IGF15<	ISO 11469

流变性能

模塑收缩率, 平行	0.3 %	ISO 294-4, 2577
模塑收缩率, 垂直	0.8 %	ISO 294-4, 2577
模塑收缩率, 平行	0.5 %	ISO 294-4
模塑收缩率, 垂直	1.2 %	ISO 294-4
模塑收缩率	0.35 %	ISO 294-4
模塑收缩率	0.1 %	ISO 294-4

机械性能

拉伸模量	4700 MPa	ISO 527-1/-2
断裂应力	79 MPa	ISO 527-1/-2
断裂伸长率	5 %	ISO 527-1/-2
弯曲模量	3550 MPa	ISO 178
压缩强度	90 MPa	ISO 604
剪切强度	40 MPa	ASTM D 732
简支梁无缺口冲击强度, +23°C	55 kJ/m ²	ISO 179/1eU
简支梁无缺口冲击强度, -30°C	25 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	8 kJ/m ²	ISO 179/1eA
悬臂梁缺口冲击强度, 23°C	13 kJ/m ²	ISO 180/1A
悬臂梁缺口冲击强度, -30°C	7.7 kJ/m ²	ISO 180/1A
洛氏硬度	58 -	ISO 2039-2
洛氏硬度, Rockwell	111 -	ISO 2039-2
Poisson's ratio	0.36 -	

热性能

熔融温度, 10°C/min	250 °C	ISO 11357-1/-3
热变形温度, 1.80 MPa	207 °C	ISO 75-1/-2
热变形温度, 0.45 MPa	235 °C	ISO 75-1/-2
维卡软化温度, 50°C/h 50N	205 °C	ISO 306
线性热膨胀系数, 平行, -40-23°C	98 E-6/K	ISO 11359-1/-2



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线膨胀系数, 平行	20 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 平行, 55-160°C	109 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 垂直, -40-23°C	40 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直	120 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直, 55-160°C	32 E-6/K	ISO 11359-1/-2
有效导热率 ^a	9.0E-8 m ² /s	
相对温度指数, 电气性能, 0.75mm	140 °C	UL 746B
相对温度指数, 电气性能, 1.5mm	140 °C	UL 746B
相对温度指数, 电气性能, 3mm	140 °C	UL 746B
相对温度指数, 冲击, 0.75mm	120 °C	UL 746B
相对温度指数, 冲击, 1.5mm	120 °C	UL 746B
相对温度指数, 冲击, 3mm	120 °C	UL 746B
相对温度指数, 强度, 0.75mm	140 °C	UL 746B
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	HB 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	HB 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	19 %	ISO 4589-1/-2
灼热丝燃烧指数, 0.75mm	700 °C	IEC 60695-2-12
灼热丝燃烧指数, 1mm	700 °C	IEC 60695-2-12
灼热丝燃烧指数, 1.5mm	700 °C	IEC 60695-2-12
灼热丝燃烧指数, 2mm	725 °C	IEC 60695-2-12
灼热丝燃烧指数, 3mm	775 °C	IEC 60695-2-12
灼热丝起燃温度, 0.75mm	675 °C	IEC 60695-2-13
灼热丝起燃温度, 1mm	675 °C	IEC 60695-2-13
灼热丝起燃温度, 1.5mm	675 °C	IEC 60695-2-13
灼热丝起燃温度, 2mm	700 °C	IEC 60695-2-13
灼热丝起燃温度, 3mm	725 °C	IEC 60695-2-13
FMVSS Class	B -	ISO 3795 (FMVSS 302)
燃烧速率, 厚度: 1毫米	33 mm/min	ISO 3795 (FMVSS 302)

电性能

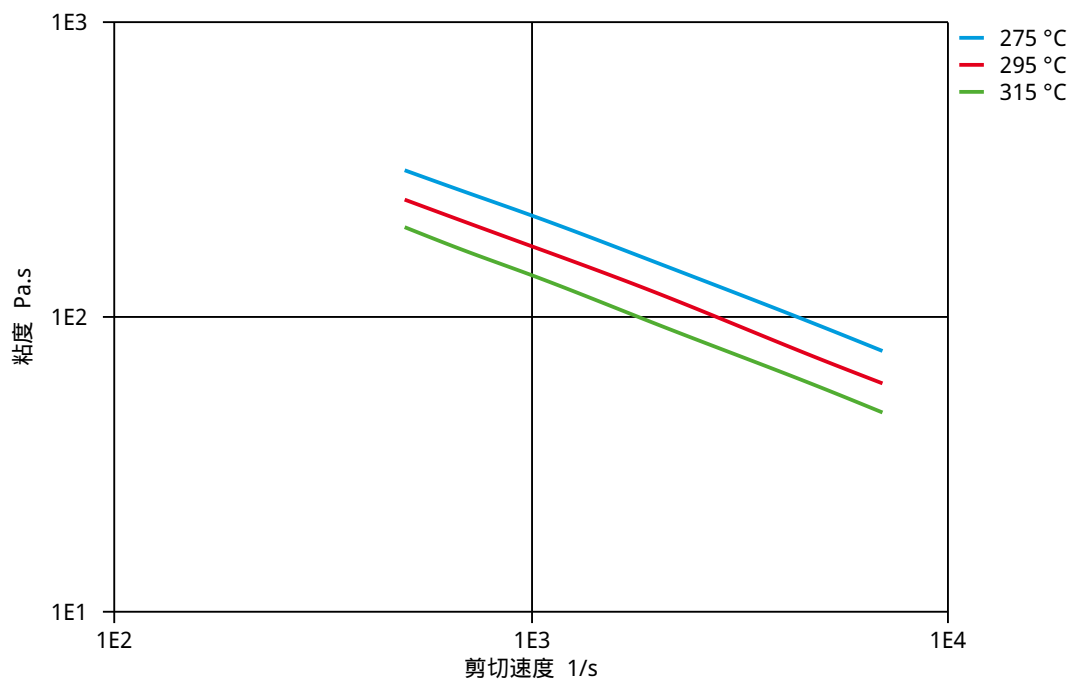
相对介电常数., 100Hz	4.5 -	IEC 62631-2-1
相对介电常数., 1MHz	3.9 -	IEC 62631-2-1
介质损耗因子, 100Hz	654 E-4	IEC 62631-2-1
介质损耗因子, 1MHz	236 E-4	IEC 62631-2-1
体积电阻率	1E11 Ohm.m	IEC 62631-3-1
表面电阻率	1E13 Ohm	IEC 62631-3-2



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粘度 - 剪切速度

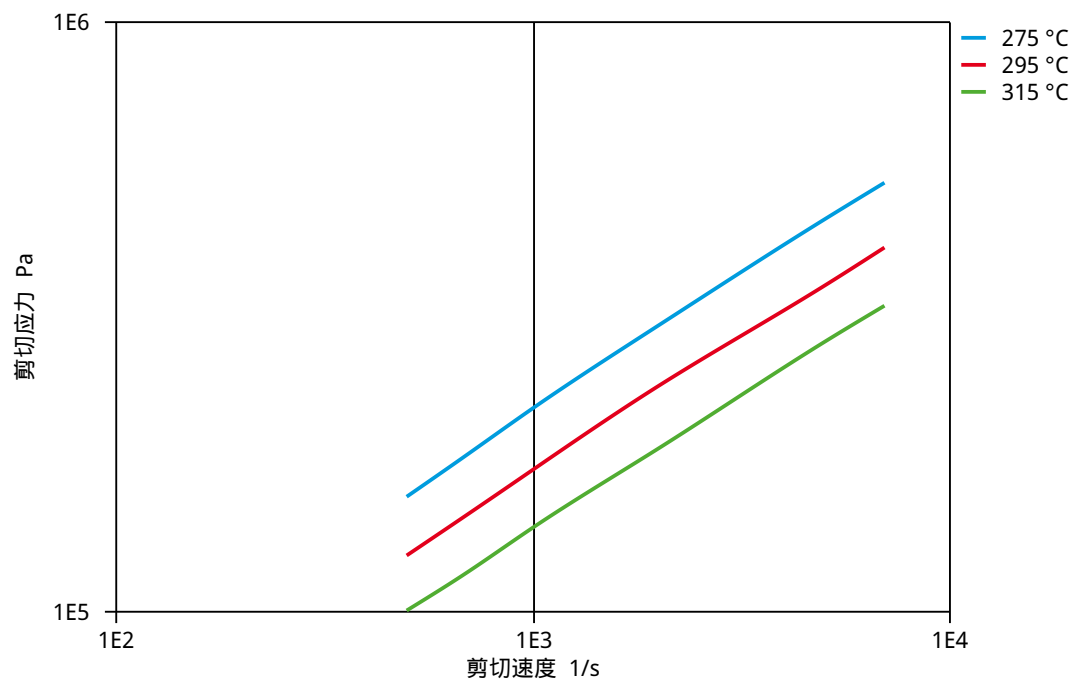




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剪切应力 - 剪切速度

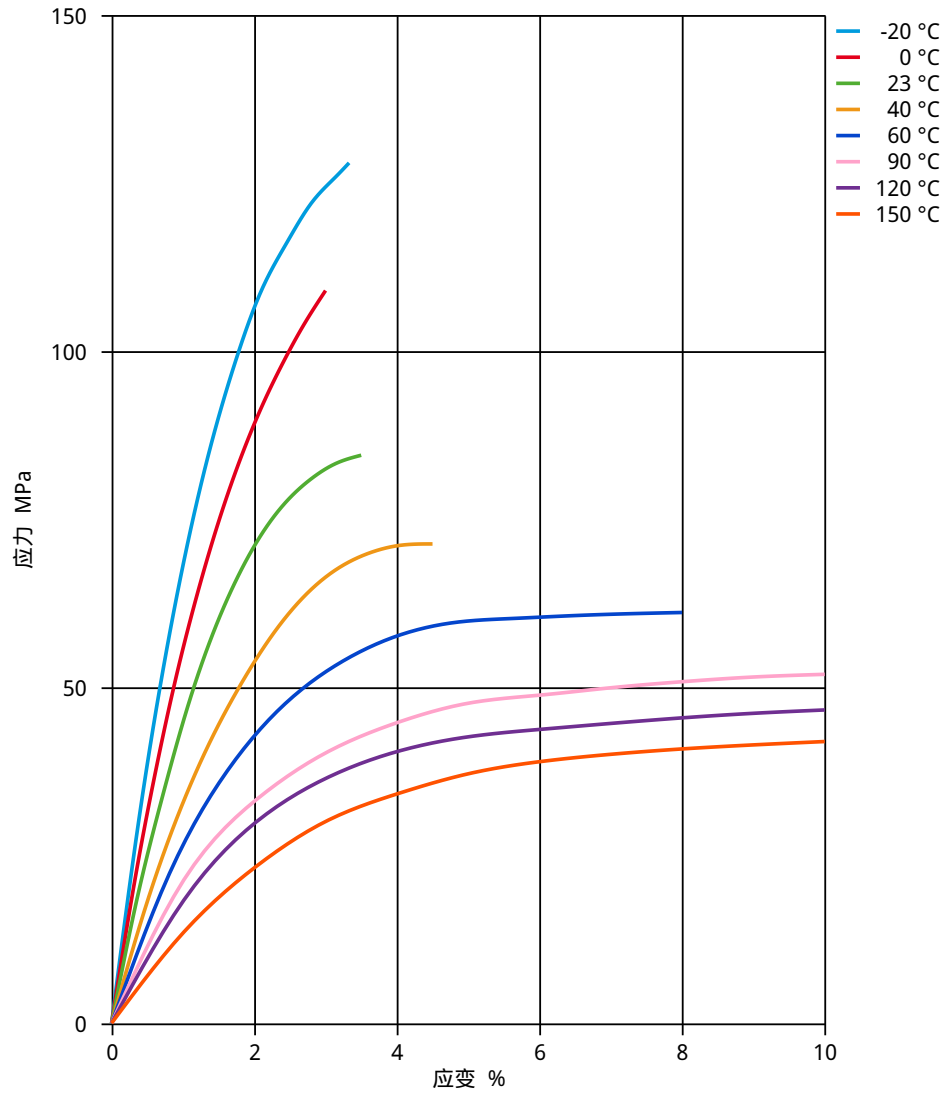




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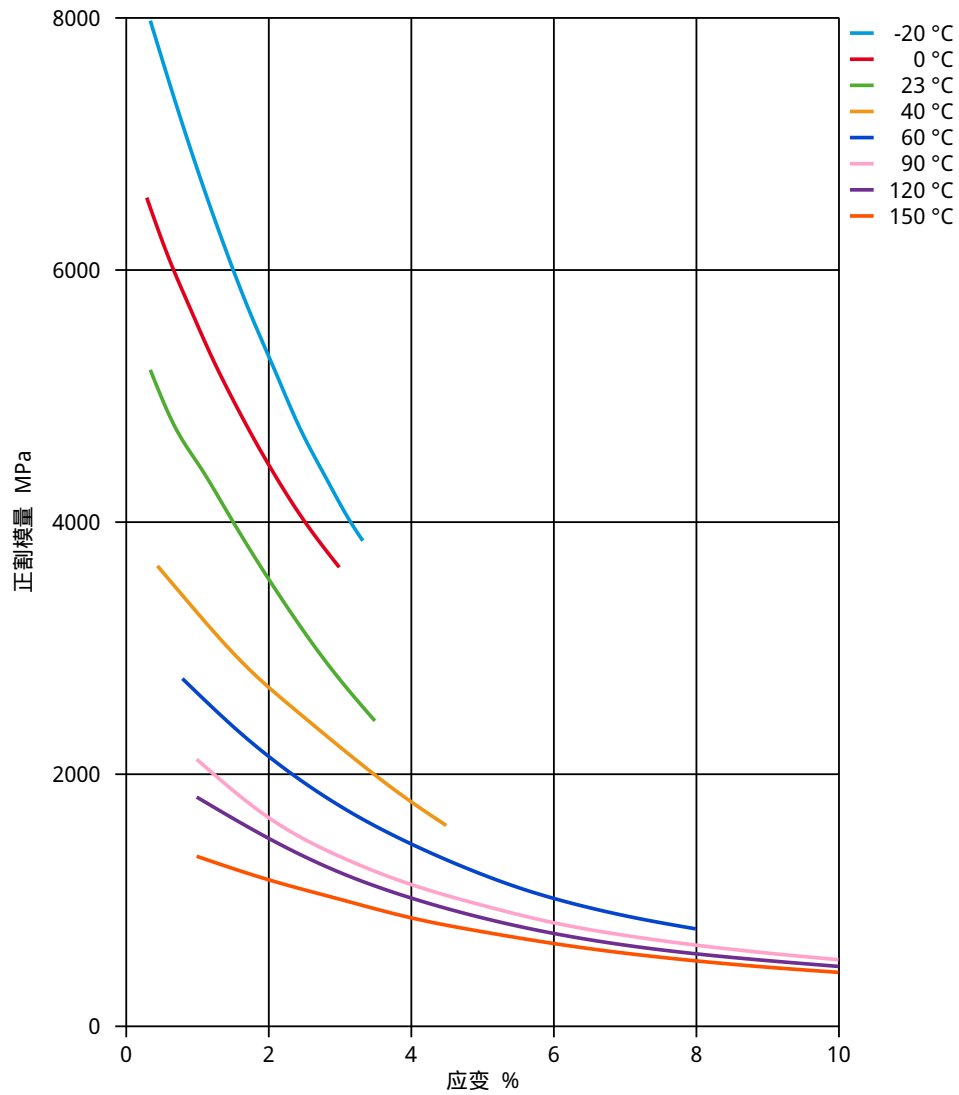
应力 - 应变.



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正割模量 - 应变.

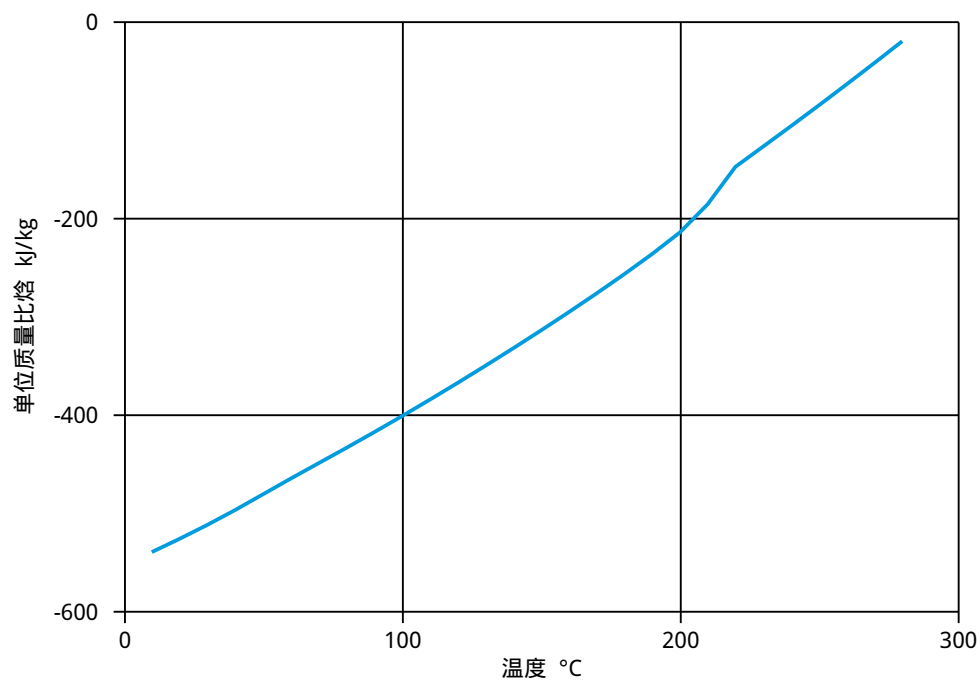




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单位质量比焓 - 温度(DSC)



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