



Rynite® FR533NH NC010 (PRELIMINARY)

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® FR533NH NC010是一种33% 玻纤增强, 阻燃, 无卤, PET

总说明

树脂鉴别	PET-GF33FR(40)	ISO 1043
制品标识码	>PET-GF33FR(40)<	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	0.7 %	ISO 294-4, 2577

机械性能

拉伸模量	13100 MPa	ISO 527-1/-2
断裂应力	85 MPa	ISO 527-1/-2
断裂伸长率	0.9 %	ISO 527-1/-2
弯曲模量	13000 MPa	ISO 178
弯曲强度	143 MPa	ISO 178
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, -40°C	11 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 -	

热性能

熔融温度, 10°C/min	249 °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	240 °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	18 E-6/K	ISO 11359-1/-2
线膨胀系数, 平行	18 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 平行, 55-160°C	11 E-6/K	ISO 11359-1/-2
线性热膨胀系数, 垂直, -40-23°C	51 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直	72 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直, 55-160°C	81 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
相对温度指数, 电气性能, 3mm	155 °C	UL 746B
相对温度指数, 冲击, 0.75mm	160 °C	UL 746B
相对温度指数, 冲击, 1.5mm	170 °C	UL 746B



Rynite® FR533NH NC010 (PRELIMINARY)

THERMOPLASTIC POLYESTER RESIN

相对温度指数, 冲击, 3mm	170 °C	UL 746B
相对温度指数, 强度, 0.75mm	160 °C	UL 746B
相对温度指数, 强度, 1.5mm	170 °C	UL 746B
相对温度指数, 强度, 3mm	170 °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	0.4 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	0.75 mm	IEC 60695-11-20
UL注册	yes -	UL 94
灼热丝燃烧指数, 0.75mm	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	825 °C	IEC 60695-2-13
灼热丝起燃温度, 1.5mm	775 °C	IEC 60695-2-13
灼热丝起燃温度, 3mm	850 °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
介电强度	34 kV/mm	IEC 60243-1
相对漏电起痕指数	350 -	IEC 60112
相对漏电起痕指数	2 PLC	UL 746A

其它性能

密度	1610 kg/m ³	ISO 1183
----	------------------------	----------

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	280 °C
模具温度	120 °C
模具温度	140 ^[2] °C

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



Rynite® FR533NH NC010 (PRELIMINARY)

THERMOPLASTIC POLYESTER RESIN

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

典型数据

添加剂

阻燃剂, 阻燃剂, 无卤/无红磷阻燃

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

The information set forth herein is furnished free of charge, is based on technical data that DuPont believes to be reliable, and represents typical values that fall within the normal range of properties. This information relates only to the specific material designated and may not be valid for such material used in combination with other materials or in other processes. It is intended for use by persons having technical skill, at their own discretion and risk. This information should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards and comply with applicable law. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

CAUTION: Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract or other acknowledgement that is consistent with the DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative.

DuPont's sole warranty is that our products will meet our standard sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DUPONT SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR NON-INFRINGEMENT. DUPONT DISCLAIMS LIABILITY FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.

© 2021 DuPont. All rights reserved.