FRIANYL® XS3 E GF40 V0E OR2003 (PRELIMINARY)

FRIANYL®

Compound designed for safety parts with high mechanical requirements, typically used to replace metal due to the high stiffness and strength, stable after conditioning. Combines flame retardant properties with better creep behavior and dimensional stability vs. an equivalent PA66 grade, with lower warpage and good surface finish.

产品信息

树脂鉴别	(PA66+PA6I/6T)-GF40 FR(40)		ISO 1043
制品标识码	>(PA66+PA6I/6T)-GF40 FR(40)<		ISO 11469
连续使用温度	120	°C	IEC 60216-1

流变性能

模塑收缩率范围, 平行	0.1 - 0.4	%	ISO 294-4, 2577
模塑收缩率范围, 垂直	0.4 - 0.7	%	ISO 294-4, 2577

机械性能

	dry/cond.		
拉伸模量	14000/12700	MPa	ISO 527-1/-2
拉伸断裂应力, 5mm/min	160/130	MPa	ISO 527-1/-2
断裂伸长率, 5mm/min	2.2/2.5	%	ISO 527-1/-2
简支梁无缺口冲击强度, 23°C	65/60	kJ/m²	ISO 179/1eU
简支梁无缺口冲击强度, -30°C	55/50	kJ/m²	ISO 179/1eU
简支梁缺口冲击强度, 23°C	9.5/10	kJ/m²	ISO 179/1eA
简支梁缺口冲击强度, -30°C	9/8.7	kJ/m²	ISO 179/1eA

热性能

	dry/cond.		
熔融温度, 10°C/min	260/*	°C	ISO 11357-1/-3

阻燃性能

	dry/cond.		
1.5mm名义厚度时的阻燃性	V-0/*	class	IEC 60695-11-10
测试用试样的厚度	1.5/*	mm	IEC 60695-11-10
厚度为h时的阻燃性	V-0/*	class	IEC 60695-11-10
测试用试样的厚度	0.8/*	mm	IEC 60695-11-10
FMVSS Class	SE		ISO 3795 (FMVSS 302)

电性能

	dry/cond.		
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	44/-	kV/mm	IEC 60243-1
相对漏电起痕指数	600/-		IEC 60112

其它性能

	dry/cond.		
吸湿率, 2mm	0.8/*	%	类似ISO 62
吸水率, 2mm	3.8/*	%	类似ISO 62
密度	1510/-	kg/m³	ISO 1183

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注塑

建议干燥	是
干燥温度	80 °C
干燥时间，除湿干燥机	4 - 6 h
加工前水分含量	≤ 0.1 %
最优熔体温度	290 °C
最低熔体温度***	270 °C
螺杆最大切线速度	≤ 0.2 m/s
最优模具温度	80 °C
最低模具温度	60 °C
最高模具温度	100 °C
背压	尽可能低 MPa

特性

加工方法	注塑
添加剂	阻燃剂
特殊性能	阻燃, 热稳定, 高光泽, 低翘曲, 蠕变性能改善

Revised: 2026-08-10 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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