



Celanex® XFR 6842 GF15

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex XFR 6842 GF15 is a halogen and antimony free flame retardant (V-0 @ 0.4 mm) 15% glass reinforced PBT grade with good processability and no corrosive emissions during processing. It is suitable for parts requiring enhanced tracking resistance, toughness, and flame retardancy at < 0.75 mm wall thickness. The product is WEEE and RoHS compliant.

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Additive	• Flame Retardant		
Features	• Antimony Free • Flame Retardant	• Good Processability • Good Toughness	• Halogen Free • Tracking Resistant
Agency Ratings	• EU 2002/96/EC (WEEE)		
RoHS Compliance	• RoHS Compliant		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	6.90	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.0 to 1.2	%	
Flow	0.50 to 0.70	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	943000	psi	ISO 527-2/1A
Tensile Stress (Break)	11500	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.1	%	ISO 527-2/1A/5
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.6	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	15	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	2.9	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	83		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	381	°F	ISO 75-2/A
Vicat Softening Temperature	405	°F	ISO 306/B50
Melting Temperature ²	437	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity	2.0E+16	ohms·cm	IEC 60093
Relative Permittivity (1 MHz)	3.30		IEC 60250
Dissipation Factor (1 MHz)	0.015		IEC 60250
Comparative Tracking Index	425	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.016 in)	V-0		UL 94

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Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min
