Celanex® XFR 4840

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex XFR 4840 is an unreinforced, flame retardant PBT grade featuring a halogen and antimony free flame retardant system. It is UL certified to be V-0 at 0.8 mm in all colors. Our proprietary flame retardant system enables a combination of excellent mechanical properties, flame retardant efficiency and processability. The product is WEEE and RoHS compliant.

General		
Material Status	• Commercial: Active	
Availability	• Europe	• North America
Additive	• Flame Retardant	• Flame Retardant
Features	• Antimony Free • Flame Retardant	• Good Processability • Halogen Free
Agency Ratings	• EU 2002/96/EC (WEEE)	
RoHS Compliance	• RoHS Compliant	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.34	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	11	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	479000	psi	ISO 527-2/1A
Tensile Stress (Break)	6530	psi	ISO 527-2/1A/50
Tensile Strain (Break)	14	%	ISO 527-2/1A/50
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	1.4	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	15	ft·lb/in²	ISO 179/1eU
Hardness	**Nominal Value**	**Unit**	**Test Method**
Ball Indentation Hardness [2]	23200	psi	ISO 2039-1
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	158	°F	ISO 75-2/A
Melting Temperature [3]	437	°F	ISO 11357-3
Electrical	**Nominal Value**	**Unit**	**Test Method**
Comparative Tracking Index	600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.031 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248 to 284	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Suggested Max Regrind	25	%
Rear Temperature	446 to 464	°F
Middle Temperature	455 to 482	°F
Front Temperature	464 to 491	°F

Celanex® XFR 4840

Celanese Corporation - Polybutylene Terephthalate

Injection	Nominal Value	Unit
Nozzle Temperature	482 to 491	°F
Processing (Melt) Temp	455 to 491	°F
Mold Temperature	149 to 199	°F
Injection Rate	Fast	
Back Pressure	0.00 to 50.0	psi

Notes

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

[2] 30s

[3] 10°C/min