

CELANEX® XFR 6842 GF30 HRHP - PBT

Description

Celanex XFR 6842 GF30 HRHP is a halogen and antimony free flame retardant (V-0 @ 0.8 mm) glass reinforced PBT grade with good processability and excellent hydrolysis resistance. It is suitable for parts requiring enhanced tracking resistance, toughness, and flame retardancy. The product is WEEE and RoHS compliant.

Physical properties	Value	Unit	Test Standard
Melt volume rate, MVR	7	cm ³ /10min	ISO 1133
MVR temperature	482	°F	ISO 1133
MVR load	11	lb	ISO 1133
Humidity absorption, 23°C/50%RH	0.2	%	ISO 62

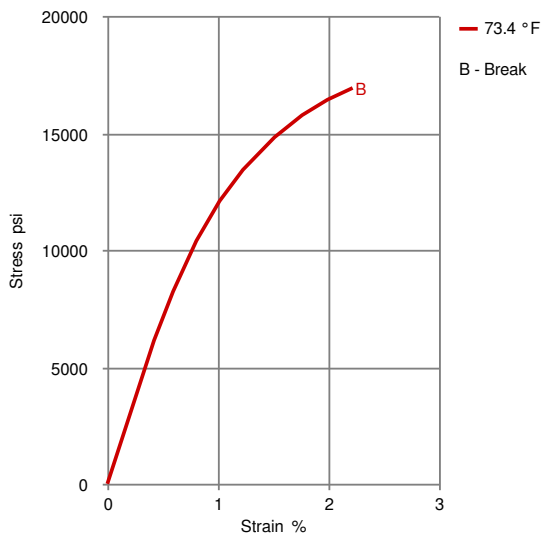
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	1.45E6	psi	ISO 527-1, -2
Tensile stress at break, 5mm/min	16700	psi	ISO 527-1, -2
Tensile strain at break, 5mm/min	2.2	%	ISO 527-1, -2
Charpy impact strength, 23°C	22.4	ft-lb/in ²	ISO 179/1eU
Charpy notched impact strength, 23°C	3.81	ft-lb/in ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	437	°F	ISO 11357-1/-3
Flammability @0.8mm nom. thickn.	V-0	class	UL 94
Flammability @1.6mm nom. thickn.	V-0	class	UL 94

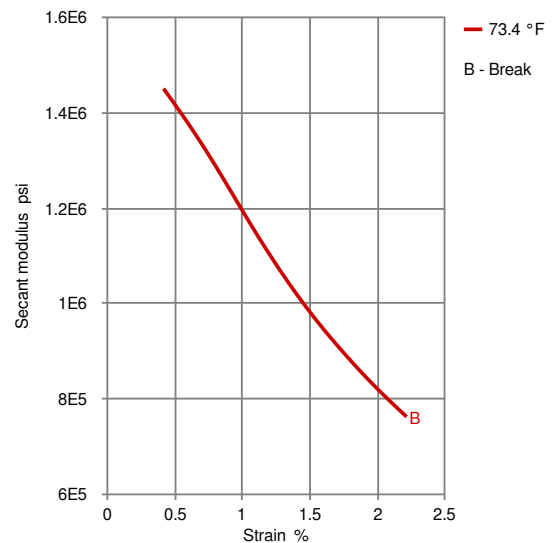
Electrical properties	Value	Unit	Test Standard
CTI 50 drops	475	V	IEC 60112

Diagrams

Stress-strain



Secant modulus-strain



Other text information

CELANEX® XFR 6842 GF30 HRHP - PBT (EXPERIMENTAL)

Pre-drying

To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-40 °F (-40 °C) at 250-285 °F (120 - 140 °C) for 4 - 6 hours.

Longer pre-drying times/storage

For subsequent storage of the material in the dryer until processed (<= 60 h) it is necessary to lower the temperature to 100° C.

Injection Molding Preprocessing

To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-40 °F (-40 °C) at 250-285 °F (120-140 °C) for 4-6 hours.

Characteristics

Special Characteristics	Flame retardant, Hydrolysis resistant
Product Categories	Glass reinforced, Specialty
Processing	Injection molding
Delivery Form	Pellets
Additives	Flame retarding agent