

## CELANEX<sup>®</sup> XFR 6842 GF30 HRCT (PRELIMINARY)

Halogen-free, nom. 30% glass-fiber reinforced, flame retardant grade with improved hydrolysis resistance and high CTI Celanex XFR 6842 GF30 HRCT is a halogen and antimony free flame retardant glass fiber reinforced PBT grade with good processability and excellent hydrolysis resistance. It is suitable for parts requiring enhanced electrical tracking resistance (CTI 600V), toughness, and flame retardancy. The product is WEEE and RoHS compliant.

8 250 5	cm³/10min °C kg	ISO 1133
10000 110 2 40 8.5	MPa MPa % kJ/m <sup>2</sup> kJ/m <sup>2</sup>	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 179/1eU ISO 179/1eA
225	°C	ISO 11357-1/-3
V-0 V-0 0.4 yes	class class mm	UL 94 UL 94 UL 94 UL 94
0.2	%	Sim. to ISO 62
140 - 120 4 - 6 0.01 25 80 - 100 40 - 120 3 fast	°C h % °C MPa MPa	
1	8 250 5 10000 110 2 40 8.5 225 V-0 V-0 V-0 V-0 V-0 0.4 yes 0.2 40 - 120 4 - 6 0.01 25 80 - 100 40 - 120 3 fast	8 cm <sup>3</sup> /10min 250 °C 5 kg 10000 MPa 110 MPa 2 % 40 kJ/m <sup>2</sup> 8.5 kJ/m <sup>2</sup> 225 °C V-0 class V-0 class V-0 class 0.4 mm yes 0.2 % 40 - 120 °C 4 - 6 h 0.01 % 25 % 80 - 100 °C 4 - 6 h 0.01 % 25 % 80 - 100 °C 4 - 6 h 0.01 % 25 %







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#### **Characteristics**

Additives

Release agent, Flame retardant

#### Additional information

Injection molding

Melt Temperature. 255-270 °C Mold Temperature \*): 80-100 °C Maximum Barrel Residence Time \*\*): 5 min Injection Speed: high Peripheral screw speed: max. 0.25 m/sec Back Pressure: 10-30 bar Injection Pressure: 600-1500 bar Holding Pressure: 400-1200 bar

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided. For grades containing flame retardants, a maximum temperature of 270 °C should not be exceeded.

Ticona recommends only externally heated hot runner systems.

\*) For moulded parts with especially high requirements to the surface quality or dimensional stability, a mold temperature of up to 120 °C can be advantageous.

\*\*) If the cylinder temperatures are higher than the recommended maximum temperatures, the max. residence time in the barrel has to be reduced.

#### **Processing Texts**

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Pre-drying	To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level of less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-40°F (-40°C) at 250-285°F (140 - 120°C) for 4 - 6 hours.
Longer pre-drying times/storage	For subsequent storage of the material in the dryer until processed ( $\leq$ 60 h) it is necessary to lower the temperature to < 100 ° C.
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Brintod: 2022.00.14	Holding Pressure: 400-1200 bar

Printed: 2023-09-14



Page: 2 of 3





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Page: 3 of 3



