

CELANEX 2003-5FC NATURAL

Revision: 2

Celanex 2003-5FC is an unreinforced PBT with improved flow, complying to FDA 21 CFR 177.1660 and the Regulation EU 10/2011, for use in food contact application.

Property	Unit	Method	Value
MVR 250/2,16	cm ³ /10min	ISO 1133	40
Density	g/cm ³	ISO R 1183 A	1,3
Tensile Stress at yield	MPa	ISO 527	57
Strain at break 50mm/min	%	ISO 527	15
Tensile Modulus	MPa	ISO 527	2500
Flammability 0.8mm HB	class	UL 94	HB
Heat Deflection Temperature A	°C	ISO 75 Teil 1u.2	60
Ball indentation hardness (Test load 358N)	N/mm ²	ISO 2039 Teil 1	137
Charpy impact strength 23°C	kJ/m ²	ISO 179/1eU	135
Charpy impact strength -30°C	kJ/m ²	ISO 179/1eU	130
Charpy Notched Impact Strength +23°C	kJ/m ²	ISO 179/1eA	5
Charpy Notched Impact Strength -30°C	kJ/m ²	ISO 179/1eA	4,5
Crystalline melting range	°C		220-225

Processing guidelines

Melt temperature	°C	240 - 250
Maximum residence time	min	5 - 10
Injection pressure	bar	600 - 1000
Hold pressure	bar	400 - 800
Back pressure	bar	10 - 30
Peripheral screw speed	m/sec	max. 0.25
Injection speed		high
Mold temperature	°C	70-90

Drying requirements: Celanex resins should be dried 3 - 4 hours at 120 - 140°C in a circulating air drying oven.

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