Crastin® FG6130 NC010

PBT — Celanese

Product Texts

Crastin® FG6130 NC010 is an unreinforced, medium high viscosity polybutylene terephthalate resin for extrusion and injection molding. It has been developed for consideration into applications such as parts for the food industry.

FOOD CONTACT

This product is manufactured according to Good Manufacturing Practice (GMP) principles and generally accepted in food contact applications in Europe and the USA when meeting applicable use conditions. For details, individual compliance statements are available from our representative.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**1.7**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.7**	%	ISO 294-4, 2577
[C] Density of melt	**1120**	kg/m³	-
[C] Thermal conductivity of melt	**0.25**	W/(m K)	-
[C] Spec. heat capacity of melt	**2050**	J/(kg K)	-
[C] Ejection temperature	**170**	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2600**	MPa	ISO 527
[C] Yield stress	**59**	MPa	ISO 527
[C] Yield strain	**8**	%	ISO 527
[C] Nominal strain at break	**50**	%	ISO 527
[C] Tensile creep modulus, 1h	**2500**	MPa	ISO 899-1
[C] Tensile creep modulus, 1000h	**1800**	MPa	ISO 899-1
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**5**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**4.5**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**225**	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**55**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**50**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**115**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**175**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**108**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**144**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
[C] Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
Yellow Card available	**yes**	-	-
[C] Oxygen index	**22**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 1MHz	**3.2**	-	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**200**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**1E12**	Ohm	IEC 62631-3-2
[C] Electric strength	**26**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.4**	%	Sim. to ISO 62
[C] Humidity absorption	**0.2**	%	Sim. to ISO 62
[C] Density	**1300**	kg/m³	ISO 1183

[C]: CAMPUS

Material specific properties	Value	Unit	Test Standard
ISO Data			
[C] Viscosity number	**130**	cm³/g	ISO 307, 1157, 1628

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Coating

Delivery form
Pellets, Natural Color

Certifications
Food contact

Regional Availability
North America, Europe, Asia Pacific, South and Central America

Other text information

Other extrusion

PREPROCESSING

Drying recommended = Yes
Drying temperature = 110-130°C
Drying time, dehumidified dryer = 2-4 h
Processing moisture content = <0.04 %

PROCESSING

Melt temperature optimum = 250°C
Melt temperature range = 240-260°C