

Crastin® T843FR NC010

THERMOPLASTIC POLYESTER RESIN

DuPont Performance Polymers

Message:

20% Glass Reinforced, Toughened, Flame Retardant, Polybutylene Terephthalate with Improved Impact Resistance

General Information			
UL YellowCard	E41938-257844		
Filler / Reinforcement	Glass fiber reinforced material, 20% filler by weight		
Additive	demoulding		
	Flame retardancy		
Features	Impact resistance, good		
	Flame retardancy		
RoHS Compliance	Contact manufacturer		
Forms	Particle		
Processing Method	Sheet extrusion molding		
	Profile extrusion molding		
	Injection molding		
Multi-Point Data	Creep Modulus vs. Time (ISO 11403-1)		
	Isochronous Stress vs. Strain (ISO 11403-1)		
	Isothermal Stress vs. Strain (ISO 11403-1)		
	Secant Modulus vs. Strain (ISO 11403-1)		
	Shear Modulus vs. Temperature, Dynamic (ISO 11403-1)		
	Shear Stress vs. Shear Rate (ISO 11403-1)		
	Viscosity vs. Shear Rate (ISO 11403-2)		
Part Marking Code (ISO 11469)	>PBTC-GF20FR(17)		
Resin ID (ISO 1043)	PBTC-GF20FR(17)		
Physical	Nominal Value	Unit	Test Method
Density	1.60	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	10.0	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Transverse flow	1.0	%	ISO 294-4
Flow	0.40	%	ISO 294-4
Water Absorption			ISO 62
Saturated, 23°C, 2.00mm	0.30	%	ISO 62

Balance, 23°C, 2.00mm, 50% RH	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	5800	MPa	ISO 527-2
Tensile Stress (Break)	90.0	MPa	ISO 527-2
Tensile Strain (Break)	4.2	%	ISO 527-2
Tensile Creep Modulus			ISO 899-1
1 hr	5400	MPa	ISO 899-1
1000 hr	3500	MPa	ISO 899-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	8.4	kJ/m ²	ISO 179/1eA
23°C	10	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	60	kJ/m ²	ISO 179/1eU
23°C	55	kJ/m ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
1.8 MPa, not annealed	180	°C	ISO 75-2/A
8.0 MPa, not annealed	120	°C	ISO 75-2/C
Vicat Softening Temperature	185	°C	ISO 306/B50
Melting Temperature ¹	205	°C	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Dielectric Strength	27	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.10		IEC 60250
1 MHz	3.90		IEC 60250
Dissipation Factor			IEC 60250
100 Hz	0.012		IEC 60250
1 MHz	0.017		IEC 60250
Comparative Tracking Index	275	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94, IEC 60695-11-10, -20
1.5 mm	V-0		UL 94, IEC 60695-11-10, -20
3.0 mm	V-0		UL 94, IEC 60695-11-10, -20
Oxygen Index	30	%	ISO 4589-2
FMVSS Flammability	DNI		FMVSS 302
Specific Heat Capacity of Melt	1850	J/kg/°C	
Thermal Conductivity of Melt	0.25	W/m/K	

Melt Temperature, Optimum	250	°C
Mold Temperature, Optimum	80	°C
Back Pressure	As low as possible	
Drying Recommended	yes	
Hold Pressure Time	3.00	s/mm
Fill Analysis	Nominal Value	Unit
Melt Density	1.32	g/cm ³
Ejection Temperature	150	°C
Injection	Nominal Value	Unit
Drying Temperature	120	°C
Drying Time - Desiccant Dryer	2.0 - 4.0	hr
Suggested Max Moisture	0.040	%
Processing (Melt) Temp	240 - 260	°C
Mold Temperature	30 - 130	°C
Holding Pressure	60.0	MPa
NOTE		

1. 10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT