Crastin® FRHR5315NH BK591LM (PRELIMINARY)

THERMOPLASTIC POLYESTER RESIN

Crastin® FRHR5315NH BK591LM is a 15% Glass Reinforced, Flame Retardant, Non-Halogenated, Hydrolysis resistant, Polybutylene Terephthalate

Product information

Resin Identification	PBT-GF15 FR(40+30)	ISO 1043
Part Marking Code	>PBT-GF15 FR(40+30)<	ISO 11469

Rheological properties

Melt volume-flow rate	10	cm^3/10min	ISO 1133
Temperature	482	°F	
Load	4.76	lb	
Molding shrinkage, parallel	0.4	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	899000	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	10400	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.9	%	ISO 527-1/-2
Charpy impact strength, 23°C	14.3	ftlb/in^2	ISO 179/1eU
Charpy impact strength, -40°C	14	ftlb/in^2	ISO 179/1eU
Charpy notched impact strength, 23°C	2.33	ftlb/in^2	ISO 179/1eA
Charpy notched impact strength, -40°C	2	ftlb/in^2	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	432	°F	ISO 11357-1/-3
Glass transition temperature, 10°C/min	140	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	388	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	426	°F	ISO 75-1/-2

Flammability

Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.0157	in	IEC 60695-11-10
Glow Wire Flammability Index, 0.75mm	1760	°F	IEC 60695-2-12
Glow Wire Ignition Temperature, 0.75mm	1380	°F	IEC 60695-2-13

Electrical properties

Comparative tracking index	600		IEC 60112

Physical/Other properties

Density	0.052	lb/in^3	ISO 1183

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Injection

Drying Recommended	yes	
Drying Temperature	248	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.04	%
Melt Temperature Optimum	482	°F
Min. melt temperature	464	°F
Max. melt temperature	500	°F
Mold Temperature Optimum	176	°F
Min. mold temperature	140	°F
Max. mold temperature	266	°F
Hold pressure range	≥8700	psi
Hold pressure time	0.0762	s/mil
Back pressure	as low as possible	psi
Ejection temperature	338	°F

Characteristics

Processing	Injection Molding
Additives	Flame retardant, Non-halogenated/Red phosphorus free flame retardant
Special characteristics	Flame retardant, Hydrolysis resistant, Laser Markable

Revised: 2026-10-08 Source: Celanese Materials Database

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.
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