

Technical Data Sheet

Polyflam 15S3324DCBLK

Polypropylene Copolymer

Product Description

15S3324DC is a 30% Fiberglass Reinforced, Flame Retardant Polypropylene Copolymer, Black

Processing Method	Injection Molding
Forms	Pellets
Appearance	Black
Additive	Flame Retardant
Filler/Reinforcement	Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	4.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.45	g/cm ³	ASTM D792
Mechanical			
Flexural Strength at Yield, (1.3 mm/min, 23 °C)	67.7	MPa	ASTM D790
Tensile Strength at Break, (5.0 mm/min, 23 °C)	51.8	MPa	ASTM D638
Tensile Strain at Break, (23 °C, 5 mm/min)	<7.0	%	ISO 527-2
Flexural Modulus			
(1.3 mm/min, 23 °C, Tangent)	6370	MPa	ASTM D790
(23 °C, 2.0 mm/min, Tangent)	7230	MPa	ISO 178
Tensile Elongation at Break, (5.0 mm/min, 23 °C)	<7.0	%	ASTM D638
Tensile Stress at Break, (23 °C, 5 mm/min)	52.4	MPa	ISO 527-2
Tensile Modulus			
(23 °C)	6560	MPa	ASTM D638
(23 °C)	6590	MPa	ISO 527-1
Flexural Stress, (23 °C, 2.0 mm/min)	71.4	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C)	40	kJ/m ²	ISO 179
(-30 °C)	19	kJ/m ²	ISO 179
Instrumented Dart Impact			
(-30 °C, Total Energy, 2.20 m/sec, Brittle Failure)	13.4	J	ASTM D3763
(23 °C, Total Energy, 2.20 m/sec, Brittle Failure)	13.8	J	ASTM D3763
Notched Izod Impact			
(23 °C)	190	J/m	ASTM D256
(-30 °C)	110	J/m	ASTM D256

Thermal

Deflection Temperature Under Load Unannealed (0.45 MPa)	155	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	131	°C	ISO 75-2/A
Deflection Temperature Under Load Unannealed (264 psi)	127	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	146	°C	ASTM D648
Coefficient of Linear Thermal Expansion (CLTE), Flow (TMA), (35 °C)	2.0E-5	cm/cm/°C	ASTM E831
Coefficient of Linear Thermal Expansion (CLTE), Perpendicular (TMA), (35 °C)	1.3E-4	cm/cm/°C	ASTM E831
RTI Str			
(1.5 mm)	65.0	°C	UL 746B
(3.0 mm)	65.0	°C	UL 746B
(2.5 mm)	65.0	°C	UL 746B

UL Information

Flame Rating		
(1.5 mm)	V-1	UL 94
(3.0 mm)	V-0	UL 94
(3.0 mm)	5VA	UL 94
(2.5 mm)	5VA	UL 94
(2.5 mm)	V-0	UL 94

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	82	°C
Nozzle Temperature	177 to 227	°C
Screw Speed	20 to 60	rpm
Processing (Melt) Temp	177 to 227	°C
Front Temperature	177 to 227	°C
Middle Temperature	177 to 227	°C
Rear Temperature	177 to 204	°C
Injection Rate	Moderate	
Back Pressure	<0.689	MPa
Mold Temperature	32 to 66	°C
Cushion	6.35 to 12.7	mm