



Maxxam™ FR C5 T-GF/10 XF V0 EP NC 70

Polypropylene Impact Copolymer

Key Characteristics

Product Description

Maxxam™ FR flame-retardant polyolefin compounds and masterbatches meet stringent flammability performance requirements defined by industry agencies, including Underwriters Laboratories UL 94 V-0, performance ratings.

General

Material Status	• Commercial: Active
Regional Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass/Mineral, 10% Filler by Weight
Features	• Flame Retardant • Good Strength • Good Processability • Halogen Free • Medium Flow • Good Stiffness • High Impact Resistance
Uses	• Consumer Applications • General Purpose • Industrial Applications • Electrical/Electronic Applications • Household Goods
RoHS Compliance	• RoHS Compliant
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ² (73°F (23°C))	1.15 g/cm ³	1.15 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	6.0 g/10 min	6.0 g/10 min	ISO 1133
Molding Shrinkage ³			ISO 294-4
Across Flow : 73°F (23°C)	0.80 to 1.2 %	0.80 to 1.2 %	
Flow : 73°F (23°C)	0.80 to 1.2 %	0.80 to 1.2 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus			ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm)	326000 psi	2250 MPa	
Tensile Stress			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm)	3630 psi	25.0 MPa	
Tensile Strain			ISO 527-2/5
Break, 73°F (23°C), 0.157 in (4.00 mm)	6.0 %	6.0 %	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact Strength (73°F (23°C))	5.5 ft·lb/in ²	12 kJ/m ²	ISO 180
Unnotched Izod Impact Strength (73°F (23°C))	14 ft·lb/in ²	30 kJ/m ²	ISO 180
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/B
66 psi (0.45 MPa), Unannealed	311 °F	155 °C	
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	158 °F	70.0 °C	
Vicat Softening Temperature	275 °F	135 °C	ISO 306/A120
Melting Temperature	320 to 329 °F	160 to 165 °C	

Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.031 in (0.8 mm)	V-2	V-2	
0.06 to 0.13 in (1.6 to 3.2 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.04 to 0.12 in (1.0 to 3.0 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.04 to 0.12 in (1.0 to 3.0 mm)	1430 °F	775 °C	
Oxygen Index	> 32 %	> 32 %	ISO 4589-2

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	1.0 to 2.0 hr	1.0 to 2.0 hr
Processing (Melt) Temp	356 to 392 °F	180 to 200 °C

Notes

¹ Typical values are not to be construed as specifications.

² ±0.03

³ PolyOne Turkey method



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