

LNPT[™] THERMOCOMP[™] COMPOUND ZFM33 14M

ZFM-33 14M

DESCRIPTION

LNP THERMOCOMP ZFM33 14M compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 20% glass fiber and minerals. Added features of this grade include: Non-Brominated & Non-Chlorinated Flame Retardant, Impact Modified, Heat Stabilized.

GENERAL INFORMATION	
Features	Flame Retardant, Heat Stabilized, Non Cl/Br flame retardant, High stiffness/Strength, Impact resistant, No PFAS intentionally added
Fillers	Glass Fiber, Mineral
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break, 5 mm/min	95	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	6100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	145	MPa	ISO 178
Flexural Modulus, 2 mm/min	5800	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	3.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.2E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	179	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	170	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.25	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	17	cm ³ /10 min	ISO 1133
INJECTION MOLDING ⁽²⁾			
Drying Temperature	80	°C	
Drying Time	2 – 8	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	295 – 315	°C	
Nozzle Temperature	295 – 315	°C	
Front - Zone 3 Temperature	280 – 315	°C	
Middle - Zone 2 Temperature	270 – 310	°C	
Rear - Zone 1 Temperature	260 – 305	°C	
Mold Temperature	75 – 105	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 70	%	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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