LNP™ THERMOCOMP™ COMPOUND DF004ER

DF-1004 EM MR
REGION EUROPE

DESCRIPTION

LNP THERMOCOMP* DF004ER is a compound based on Polycarbonate resin containing 20% Glass Fiber. Added features of this material include: Easy Molding. Mold Release.

TYPICAL PROPERTY VALUES

Revision 20191031

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 5 mm/min	97	MPa	ISO 527
Tensile Stress, break, 5 mm/min	120	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.6	%	ISO 527
Tensile Strain, break, 5 mm/min	3.6	%	ISO 527
Tensile Modulus, 1 mm/min	5850	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	178	MPa	ISO 178
Flexural Modulus, 2 mm/min	5500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	54	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
THERMAL			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	141	°C	ISO 75/Af
Relative Temp Index, Elec [1]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	80	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.25 – 0.45	%	SABIC method
Density	1.31	g/cm³	ISO 1183
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E45329-101344593	-	-
UL Recognized, 94V-1 Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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