+135-3858-6433 (GuangDong)
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LNP™ THERMOCOMP™ Compound MF0069S

Americas: OBSOLETE

Also known as: LNP™ THERMOCOMP™ Compound MFX-1006 FR HS
Product reorder name: MF0069S

LNP* Thermocomp* MF0069S is a compound based on Polypropylene resin containing Glass Fiber, Flame Retardant. Added features of this material include: Chemically Coupled, Flame Retardant, Heat Stabilized.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	76	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	9050	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	125	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	118	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	7240	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	75	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.1	%	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	8350	MPa	ISO 527
Flexural Stress	124	MPa	ISO 178
Flexural Modulus, 2 mm/min	7740	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	445	J/m	ASTM D 4812
Izod Impact, notched, 23°C	79	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Instrumented Impact Total Energy, 23°C	6	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	155	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	142	°C	ASTM D 648

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, flow	3.5E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.8E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	151	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	136	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.46	-	ASTM D 792
Density	1.46	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8 - 1.1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.03	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Melt Temperature	225 - 250	°C
Front - Zone 3 Temperature	240 - 250	°C
Middle - Zone 2 Temperature	215 - 225	°C
Rear - Zone 1 Temperature	195 - 205	°C
Mold Temperature	30 - 50	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

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