+135-3858-6433 (GuangDong)
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LNP™ THERMOCOMP™ Compound Noryl_HM3020
Americas: COMMERCIAL

LNP THERMOCOMP NORYL_HM3020 compound is a 30% Glass/Mineral filled, high modulus grade. DTUL 248F (120C). UL94 V-1/5VA rated in black and gray.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1090	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	1470	kgf/cm²	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	77300	kgf/cm²	ASTM D 790
Hardness, Rockwell M	88	-	ASTM D 785
Taber Abrasion, CS-17, 1 kg	35	mg/1000cy	ASTM D 1044
Coefficient of Friction on self, Static	0.42	-	ASTM D 1894
Coefficient of Friction on steel, Static	0.4	-	ASTM D 1894
IMPACT			
Izod Impact, notched, 23°C	9	cm-kgf/cm	ASTM D 256
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	120	°C	ASTM D 648
CTE, -40°C to 95°C, flow	2.34E-05	1/°C	ASTM E 831
CTE, -40°C to 95°C, xflow	3.42E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL			
Specific Gravity	1.31	-	ASTM D 792
Water Absorption, 24 hours	0.06	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm (5)	0.25	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.3	%	SABIC Method
ELECTRICAL			
Volume Resistivity	1.E+17	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+17	Ohm	ASTM D 257

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
ELECTRICAL			
Dielectric Strength, in air, 1.6 mm	25	kV/mm	ASTM D 149
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	0	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1.47	mm	UL 94
UL Recognized, 94-5VA Rating (3)	2.59	mm	UL 94

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	105 - 110	°C
Drying Time	3 - 4	hrs
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	%