LNP™ COLORCOMP™ COMPOUND NX05467

DESCRIPTION

LNP COLORCOMP NX05467 is an unfilled Polycarbonate+ABS (PC+ABS) resin. Added features of this material is: Non-Chlorinated, non-Brominated Flame Retardant with UL V0, 5VB and 5VA flame rating.

TYPICAL PROPERTY VALUES

Revision 20200422

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	66	MPa	ASTM D 638
Tensile Strain, break	50	%	ASTM D 638
Flexural Stress	103	MPa	ASTM D 790
Flexural Modulus	2680	MPa	ASTM D 790
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	87 – 91	°C	ASTM D 648
Relative Temp Index, Elec [1]	85	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	85	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	85	°C	UL 746B
PHYSICAL			
Specific Gravity	1.18	-	ASTM D 792
Melt Flow Rate, 260°C/2.16 kgf	17	g/10 min	ASTM D 1238
Mold Shrinkage, flow	0.4 – 0.6	%	SABIC method
Mold Shrinkage, xflow	0.4 – 0.6	%	SABIC method
ELECTRICAL			
Volume Resistivity	1.E+15	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+15	Ohm	ASTM D 257
Dielectric Strength, in oil, 0.8 mm	890	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 1.6 mm	640	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	430	kV/mm	IEC 60243-1
Relative Permittivity, 60 Hz	2.8	-	IEC 60250
Relative Permittivity, 1 MHz	2.7	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.004	-	IEC 60250
Dissipation Factor, 1 MHz	0.008	-	IEC 60250
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥1.5	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 2	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 3	≥1.5	mm	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D 495
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-104340779	-	-
UL Recognized, 94HB Flame Class Rating	≥0.7	mm	UL 94
UL Recognized, 94V-1 Flame Class Rating	≥1.2	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Recognized, 94-5VB Flame Class Rating	≥2.0	mm	UL 94
UL Recognized, 94-5VA Flame Class Rating	≥3.4	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	245 – 275	°C	
Nozzle Temperature	245 – 275	°C	
Front - Zone 3 Temperature	245 – 275	°C	
Middle - Zone 2 Temperature	220 – 265	°C	
Rear - Zone 1 Temperature	220 – 255	°C	
Mold Temperature	60 – 80	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.038 – 0.076	mm	

(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.

DISCLAIMER