LNP™ COLORCOMP™ COMPOUND NX05467

DESCRIPTION

LNP COLORCOMP NX05467 compound is based on Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend. Added features of this grade is: Non-Chlorinated, Non-Brominated Flame Retardant with UL V0, 5VB and 5VA flame rating.

GENERAL INFORMATION	
Features	Flame Retardant, Aesthetics/Visual effects, Non Cl/Br flame retardant
Fillers	Unreinforced
Polymer Types	Polycarbonate + ABS (PC+ABS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Home Decoration, Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	66	MPa	ASTM D638
Tensile Strain, break	50	%	ASTM D638
Flexural Stress	103	MPa	ASTM D790
Flexural Modulus	2680	MPa	ASTM D790
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	87 – 91	°C	ASTM D648
Relative Temp Index, Elec [2]	85	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	85	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	85	°C	UL 746B
PHYSICAL [1]			
Specific Gravity	1.18	-	ASTM D792
Melt Flow Rate, 260°C/2.16 kgf	17	g/10 min	ASTM D1238
Mold Shrinkage, flow [3]	0.4 – 0.6	%	SABIC method
Mold Shrinkage, xflow [3]	0.4 – 0.6	%	SABIC method
ELECTRICAL [1]			
Volume Resistivity	1.E+15	Ω.cm	ASTM D257
Surface Resistivity	1.E+15	Ω	ASTM D257
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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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 D495
FLAME CHARACTERISTICS (2)			
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
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 (4)			
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) 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) 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.

(3) 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.

(4) 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.

DISCLAIMER