

Product Texts

LNP COLORCOMP NX06514 is an unfilled Polycarbonate+ABS resin. Added feature of this material are: non-chlorinated, non-brominated flame retardant with UL V0 & 5VB flame rating, improved heat resistance, balanced flow and impact. This grade is an excellent candidate for a wide variety of applications including appliances, lighting and electrical.

UL Yellow Card Link [F121562-104340812](https://www.ul.com/yellow-card-link/F121562-104340812)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	10	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2800	MPa	ISO 527
Yield stress	60	MPa	ISO 527
Yield strain	4	%	ISO 527
Stress at break	50	MPa	ISO 527
Strain at break	50	%	ISO 527
Flexural modulus	2700	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	45	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	15	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	N	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	44	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	14	kJ/m ²	ISO 180/1A
Rockwell hardness	R 123	-	ISO 2039-2
Ball indentation hardness	116	MPa	ISO 2039-1
ASTM Data			
Tensile Strength at Yield	62	MPa	ASTM D 638
Elongation at Break	40	%	ASTM D 638
Rockwell Hardness	R 123	-	ASTM D 785
Taber Abrasion Resistance	54	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/8 in	534	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	160	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	118	°C	ISO 306
Vicat softening temperature, B	110	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	112	°C	ISO 306
Coeff. of linear therm. expansion, parallel	80	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	80	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.5	mm	-
Thermal Conductivity	0.2	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13

LNP™ COLORCOMP™ Compound NX06514

(PC+ABS)

Saudi Basic Industries Corporation (SABIC)

GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	800	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-
Glow Wire Ignition Temperature (GWIT)	800	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	72	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	72	E-6/K	ASTM D 696
DTUL @ 264 psi	90	°C	ASTM D 648
Vicat Temperature	112	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0288	W/(m K)	ASTM C 177

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	2.7	-	IEC 62631-2-1
Dissipation factor, 1MHz	60	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	35	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	19.4	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.005	-	ASTM D 150
Dielectric Constant, 60 Hz	3	-	ASTM D 150
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1220	kg/m ³	ISO 1183
Density	1220	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80 - 90	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.04	%	-
Melt temperature	245 - 275	°C	-
Mold temperature	60 - 80	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	220 - 255	°C	-
Zone 2	220 - 275	°C	-
Zone 3	245 - 275	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Regional Availability

North America, Europe, Asia Pacific