LNP™ COLORCOMP™ Compound 9X20038

(PC+ASA) Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP COLORCOMP 9X20038 compound is based on Polycarbonate / Acrylonitrile styrene acrylate (PC/ASA) blend. Added features of this grade include; increased flow, improved release and easy processing.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**33**	cm³/10min	ISO 1133
Temperature	**260**	°C	-
Load	**5**	kg	-
ASTM Data			
Melt Flow Index, MFI	**35**	g/10min	ASTM D 1238
Temperature	**260**	°C	-
Load	**5**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2100**	MPa	ISO 527
Yield stress	**55**	MPa	ISO 527
Yield strain	**5**	%	ISO 527
Strain at break	**75**	%	ISO 527
Flexural modulus, 23°C	**2500**	MPa	ISO 178
Flexural strength	**76**	MPa	ISO 178
Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**60**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**15**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**50**	kJ/m²	ISO 180/1A
Izod notched impact strength	**18**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
Puncture energy, +23°C	**90**	J	ISO 6603-2
Puncture energy, -30°C	**95**	J	ISO 6603-2
Rockwell hardness	**R 115**	-	ISO 2039-2
Ball indentation hardness	**120**	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	**2200**	MPa	ASTM D 638
Tensile Strength at Yield	**55**	MPa	ASTM D 638
Elongation at Yield	**5**	%	ASTM D 638
Flexural Modulus	**2200**	MPa	ASTM D 790
Flexural Strength	**84**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**580**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**140**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**N**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**112**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**130**	°C	ISO 75-1/-2
Vicat softening temperature, B	**129**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**85**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**85**	E-6/K	ISO 11359-1/-2
Glow Wire Flammability Index (GWFI)	**750**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**2**	mm	-
Glow Wire Flammability Index (GWFI)	**750**	°C	IEC 60695-2-12
GWFI - thickness tested (2)	**2.5**	mm	-
Glow Wire Flammability Index (GWFI)	**775**	°C	IEC 60695-2-12
GWFI - thickness tested (3)	**3**	mm	-
Glow Wire Ignition Temperature (GWIT)	**775**	°C	IEC 60695-2-13
GWIT - thickness tested (1)	**2**	mm	-

Glow Wire Ignition Temperature (GWIT)	**775**	°C	IEC 60695-2-13
GWIT - thickness tested (2)	**2.5**	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	**85**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**85**	E-6/K	ASTM D 696
DTUL @ 66 psi	**128**	°C	ASTM D 648
DTUL @ 264 psi	**111**	°C	ASTM D 648
Vicat Temperature	**129**	°C	ASTM D 1525

Other properties	**Value**	**Unit**	**Test Standard**
Water absorption	**0.1**	%	Sim. to ISO 62
Density	**1200**	kg/m³	ISO 1183
Density	**1170**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	**Value**	**Unit**	**Test Standard**
Pre-drying - Temperature	**100 - 120**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**260 - 290**	°C	-
Mold temperature	**60 - 90**	°C	-
Feed temperature	**40 - 80**	°C	-
Zone 1	**230 - 260**	°C	-
Zone 2	**250 - 290**	°C	-
Zone 3	**250 - 290**	°C	-
Nozzle temperature	**240 - 280**	°C	-

Characteristics

Processing
Injection Molding

Additives
Release agent

Special Characteristics
High impact or impact modified

Applications
Electrical and Electronical

Regional Availability
North America, Europe, Asia Pacific, South and Central America