LNP™ COLORCOMP™ COMPOUND J1000E

J1000EM

DESCRIPTION

LNP COLORCOMP J1000E compound is based on unfilled Polyethersulfone (PES) resin. Added features of this grade include: Easy Molding.

GENERAL INFORMATION	
Features	Good Processability, Aesthetics/Visual effects, High temperature resistance
Fillers	Unreinforced
Polymer Types	Polyethersulfone (PESU)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 50 mm/min	91	MPa	ISO 527
Tensile Stress, break, 50 mm/min	65	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6.8	%	ISO 527
Tensile Modulus, 1 mm/min	2700	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	136	MPa	ISO 178
Flexural Modulus, 2 mm/min	2800	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	5.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.7E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	197	°C	ISO 75/Af
Relative Temp Index, Elec [2]	180	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	170	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	180	°C	UL 746B
PHYSICAL [1]			
Mold Shrinkage, flow [3]	0.9	%	SABIC method
Density	1.37	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.9	%	ISO 62-1

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL [1]			
Hot-Wire Ignition (HWI), PLC 3	≥0.81	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 4	≥0.43	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥0.43	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 1	≥0.81	mm	UL 746A
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E45329-101283858	-	-
UL Recognized, 94V-0 Flame Class Rating	≥0.81	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥0.43	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	355 – 370	°C	
Front - Zone 3 Temperature	370 – 380	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	140 – 150	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	rpm	

(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