

Product Texts

LNP COLORCOMP W1000PRB compound is based on Polybutylene Terephthalate (PBT) resin. Added features of this grade include: Healthcare, Food Contact Compliant, Biocompatible (ISO 10993 or USP Class VI), EtO and Gamma Sterilizable, Mold Release.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	70	cm ³ /10min	ISO 1133
Temperature	265	°C	-
Load	2.16	kg	-
ASTM Data			
Melt Flow Index, MFI	80	g/10min	ASTM D 1238
Temperature	265	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	3.2	%	ISO 527
Stress at break	49	MPa	ISO 527
Strain at break	10	%	ISO 527
Flexural modulus	2260	MPa	ISO 178
Flexural strength	80	MPa	ISO 178
Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	2	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	2	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2700	MPa	ASTM D 638
Tensile Strength at Yield	60	MPa	ASTM D 638
Tensile Strength at Break	26	MPa	ASTM D 638
Elongation at Yield	3.7	%	ASTM D 638
Elongation at Break	10	%	ASTM D 638
Flexural Modulus	2500	MPa	ASTM D 790
Izod Impact notched, 1/8 in	30	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	30	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	49	°C	ISO 75-1/-2
Vicat softening temperature, B	183	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	180	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	150	°C	ASTM D 648
DTUL @ 264 psi	54	°C	ASTM D 648
Vicat Temperature	180	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.08	%	Sim. to ISO 62
Density	1310	kg/m ³	ISO 1183
Density	1310	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	245 - 260	°C	-
Mold temperature	50 - 75	°C	-

Zone 1	230 - 250	°C	-
Zone 2	240 - 255	°C	-
Zone 3	245 - 260	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Applications

Medical

Special Characteristics

Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

Regional Availability

North America, Europe, Asia Pacific

Certifications

Food contact, US Pharmacopeia Class VI Approved