

Product Texts

LNP LUBRICOMP WCL36 compound is based on Polybutylene Terephthalate (PBT) resin containing 30% carbon fiber, 15% PTFE. Added features of this grade include: Electrically Conductive, Wear Resistant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	2	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	20600	MPa	ISO 527
Yield stress	130	MPa	ISO 527
Yield strain	1	%	ISO 527
Stress at break	121	MPa	ISO 527
Strain at break	1	%	ISO 527
Flexural modulus	18100	MPa	ISO 178
Flexural strength	187	MPa	ISO 178
Izod impact strength, +23°C, 4mm	24	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	3	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	23380	MPa	ASTM D 638
Tensile Strength at Yield	125	MPa	ASTM D 638
Tensile Strength at Break	125	MPa	ASTM D 638
Elongation at Yield	1	%	ASTM D 638
Elongation at Break	1	%	ASTM D 638
Flexural Modulus	14900	MPa	ASTM D 790
Izod Impact notched, 1/8 in	36	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	390	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	210	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	223	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	13	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	36	E-6/K	ASTM D 696
DTUL @ 66 psi	222	°C	ASTM D 648
DTUL @ 264 psi	210	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.05	%	Sim. to ISO 62
Density	1510	kg/m ³	ISO 1183
Water Absorption, 24hr	0.03	%	ASTM D 570
Density	1510	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.05	%	-
Melt temperature	240 - 265	°C	-
Mold temperature	80 - 100	°C	-
Zone 1	220 - 230	°C	-
Zone 2	245 - 255	°C	-
Zone 3	260 - 270	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity