

Product Texts

LNP LUBRICOMP SX93441D compound is based on Nylon 12 resin containing proprietary fillers. Added features of this grade include: Internally Lubricated, Wear Resistant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.45	mm/mm	ASTM D 955
Mold Shrinkage, TD	1.45	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	5410	MPa	ISO 527
Yield stress	92	MPa	ISO 527
Yield strain	4.9	%	ISO 527
Stress at break	91	MPa	ISO 527
Strain at break	6.3	%	ISO 527
Flexural modulus	4720	MPa	ISO 178
Flexural strength	136	MPa	ISO 178
Izod impact strength, +23°C, 4mm	58	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	10	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	5410	MPa	ASTM D 638
Tensile Strength at Yield	93	MPa	ASTM D 638
Tensile Strength at Break	86	MPa	ASTM D 638
Elongation at Yield	4.9	%	ASTM D 638
Elongation at Break	6.1	%	ASTM D 638
Flexural Modulus	4480	MPa	ASTM D 790
Izod Impact notched, 1/8 in	127	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	870	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	146	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	170	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 66 psi	175	°C	ASTM D 648
DTUL @ 264 psi	161	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.2	%	Sim. to ISO 62
Water Absorption, 24hr	0.15	%	ASTM D 570
Density	1200	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.2	%	-
Melt temperature	225 - 240	°C	-
Mold temperature	70 - 80	°C	-
Zone 1	215 - 225	°C	-
Zone 2	220 - 230	°C	-
Zone 3	225 - 240	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Applications

Automotive