

Product Texts

LNP LUBRICOMP SP003 compound is based on Nylon 12 resin containing 15% PTFE/silicone. Added features of this grade include: Internally Lubricated, Wear Resistant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	1.0	%	ISO 294-4, 2577
Molding shrinkage, normal	1.9	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	1	mm/mm	ASTM D 955
Mold Shrinkage, TD	1.9	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	1580	MPa	ISO 527
Yield stress	38	MPa	ISO 527
Yield strain	18.4	%	ISO 527
Stress at break	36	MPa	ISO 527
Strain at break	32.9	%	ISO 527
Flexural modulus	1300	MPa	ISO 178
Flexural strength	44	MPa	ISO 178
Izod impact strength, +23°C, 4mm	48	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	1370	MPa	ASTM D 638
Tensile Strength at Yield	37	MPa	ASTM D 638
Tensile Strength at Break	35	MPa	ASTM D 638
Elongation at Yield	17.5	%	ASTM D 638
Elongation at Break	23.9	%	ASTM D 638
Flexural Modulus	1370	MPa	ASTM D 790
Izod Impact notched, 1/8 in	53	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	683	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 0.45 MPa	134	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 66 psi	150	°C	ASTM D 648
DTUL @ 264 psi	146	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1090	kg/m ³	ISO 1183
Water Absorption, 24hr	0.2	%	ASTM D 570
Density	1090	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

Asia Pacific

Applications

Automotive