

Product Texts

LNP LUBRICOMP IAL12 compound is based on Nylon 6/12 resin containing 5% PTFE, 10% aramid fiber. Added features of this grade include: Wear Resistant.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	2	mm/mm	ASTM D 955
Mold Shrinkage, TD	3	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2920	MPa	ISO 527
Yield strain	8.2	%	ISO 527
Stress at break	63	MPa	ISO 527
Strain at break	8.8	%	ISO 527
Flexural modulus	3630	MPa	ISO 178
Flexural strength	74	MPa	ISO 178
Izod impact strength, +23°C, 4mm	38	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	2	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	3100	MPa	ASTM D 638
Tensile Strength at Break	65	MPa	ASTM D 638
Elongation at Yield	8.1	%	ASTM D 638
Elongation at Break	8.6	%	ASTM D 638
Flexural Modulus	2840	MPa	ASTM D 790
Izod Impact notched, 1/8 in	40	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	440	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	90	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	172	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	86	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	110	E-6/K	ASTM D 696
DTUL @ 66 psi	187	°C	ASTM D 648
DTUL @ 264 psi	100	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.32	%	Sim. to ISO 62
Density	1120	kg/m ³	ISO 1183
Water Absorption, 24hr	0.21	%	ASTM D 570
Density	1130	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	270 - 275	°C	-
Mold temperature	65 - 95	°C	-
Zone 1	255 - 265	°C	-
Zone 2	260 - 270	°C	-
Zone 3	270 - 280	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific