

Product Texts

LNP LUBRICOMP RFL46ES compound is based on Nylon 6/6 resin containing 30% glass fiber, 20% PTFE. Added features of this grade include: Wear Resistant, Heat Stabilized, Easy Molding.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.35	mm/mm	ASTM D 955
Mold Shrinkage, TD	1.95	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10400	MPa	ISO 527
Stress at break	145	MPa	ISO 527
Strain at break	2.6	%	ISO 527
Flexural modulus	9260	MPa	ISO 178
Flexural strength	221	MPa	ISO 178
Izod impact strength, +23°C, 4mm	56	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	9	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	10880	MPa	ASTM D 638
Tensile Strength at Break	146	MPa	ASTM D 638
Elongation at Break	2.6	%	ASTM D 638
Flexural Modulus	9280	MPa	ASTM D 790
Izod Impact notched, 1/8 in	97	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	939	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	232	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	251	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	31	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	84.1	E-6/K	ASTM D 696
DTUL @ 66 psi	251	°C	ASTM D 648
DTUL @ 264 psi	233	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.82	%	Sim. to ISO 62
Water Absorption, 24hr	0.43	%	ASTM D 570
Density	1550	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	≤0.25	%	-
Melt temperature	280 - 305	°C	-
Mold temperature	95 - 110	°C	-
Zone 1	265 - 275	°C	-
Zone 2	280 - 295	°C	-
Zone 3	295 - 305	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing
Injection Molding

Regional Availability
North America, Europe, Asia Pacific