

LNP™ LUBRICOMP™ Compound KL003

(POM+PTFE)

Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP LUBRICOMP KL003 compound is based on Acetal (POM) Copolymer resin containing 15% PTFE. 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	2	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2460	MPa	ISO 527
Yield stress	46	MPa	ISO 527
Yield strain	9	%	ISO 527
Stress at break	46	MPa	ISO 527
Strain at break	16	%	ISO 527
Flexural modulus	2240	MPa	ISO 178
Izod impact strength, +23°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	3	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	2530	MPa	ASTM D 638
Tensile Strength at Yield	48	MPa	ASTM D 638
Tensile Strength at Break	48	MPa	ASTM D 638
Elongation at Yield	10	%	ASTM D 638
Elongation at Break	19	%	ASTM D 638
Flexural Modulus	2210	MPa	ASTM D 790
Izod Impact notched, 1/8 in	40	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	650	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	88	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	149	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	107	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	107	E-6/K	ASTM D 696
DTUL @ 66 psi	158	°C	ASTM D 648
DTUL @ 264 psi	98	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.29	%	Sim. to ISO 62
Density	1490	kg/m ³	ISO 1183
Water Absorption, 24hr	0.2	%	ASTM D 570
Density	1490	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Melt temperature	200 - 215	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	175 - 190	°C	-
Zone 2	195 - 205	°C	-
Zone 3	210 - 220	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific