

**LNP™ LUBRICOMP™ Compound KP004AXZ**

(POM+PTFE)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP LUBRICOMP KP004AXZ compound is based on Acetal (POM) Homopolymer resin containing 20% PTFE/silicone. Added features of this grade include: Wear Resistant.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	2.1	%	ISO 294-4, 2577
Molding shrinkage, normal	2.0	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Mold Shrinkage, MD	2.1	mm/mm	ASTM D 955
Mold Shrinkage, TD	2.1	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2600	MPa	ISO 527
Stress at break	45	MPa	ISO 527
Strain at break	10.5	%	ISO 527
Flexural modulus	2800	MPa	ISO 178
Flexural strength	77	MPa	ISO 178
Izod impact strength, +23°C, 4mm	29	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	2200	MPa	ASTM D 638
Tensile Strength at Break	50	MPa	ASTM D 638
Elongation at Break	12.5	%	ASTM D 638
Flexural Modulus	2410	MPa	ASTM D 790
Flexural Strength	75	MPa	ASTM D 790
Izod Impact notched, 1/8 in	48	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	427	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	99	°C	ISO 75-1/-2
<b>ASTM Data</b>			
DTUL @ 66 psi	163	°C	ASTM D 648
DTUL @ 264 psi	99	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1490	kg/m <sup>3</sup>	ISO 1183
Water Absorption, 24hr	0.2	%	ASTM D 570
Density	1490	kg/m <sup>3</sup>	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