LNP™ LUBRICOMP™ Compound KAL22

(POM+PTFE)-AF10 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP LUBRICOMP KAL22 compound is based on Acetal (POM) Copolymer resin containing 10% PTFE, 10% aramid fiber. Added features of this grade include: Wear Resistant.

UL Yellow Card Link E207780-102991912

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**11**	cm³/10min	ISO 1133
Temperature	**230**	°C	-
Load	**10**	kg	-
ASTM Data			
Melt Flow Index, MFI	**13**	g/10min	ASTM D 1238
Temperature	**230**	°C	-
Load	**10**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**3400**	MPa	ISO 527
Yield stress	**62**	MPa	ISO 527
Yield strain	**5.9**	%	ISO 527
Strain at break	**6.5**	%	ISO 527
Flexural modulus	**3300**	MPa	ISO 178
Flexural strength	**88**	MPa	ISO 178
Charpy impact strength, +23°C	**53**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**14**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	**40**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**9**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**3500**	MPa	ASTM D 638
Tensile Strength at Break	**58**	MPa	ASTM D 638
Elongation at Yield	**6.5**	%	ASTM D 638
Elongation at Break	**7.4**	%	ASTM D 638
Flexural Modulus	**3400**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**45**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**540**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**104**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**152**	°C	ISO 75-1/-2
Vicat softening temperature, B	**152**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**153**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**77**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**120**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
ASTM Data			
DTUL @ 66 psi	**162**	°C	ASTM D 648
DTUL @ 264 psi	**120**	°C	ASTM D 648
Vicat Temperature	**152**	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.1**	%	Sim. to ISO 62
Density	**1460**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.1**	%	ASTM D 570
Density	**1460**	kg/m³	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