LNP™ LUBRICOMP™ COMPOUND KAL22M

KAL-4022 M

DESCRIPTION

LNP LUBRICOMP* KAL22M is a compound based on Acetal Copolymer resin containing 10% PTFE, 10% Aramid. Added features of this material include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191210

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	41	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	8.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	14	%	ASTM D 638
Tensile Modulus, 5 mm/min	2860	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2430	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	8.8	%	ISO 527
Tensile Strain, break, 5 mm/min	14	%	ISO 527
Tensile Modulus, 1 mm/min	2590	MPa	ISO 527
Flexural Stress	62	MPa	ISO 178
Flexural Modulus, 2 mm/min	2420	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	367	J/m	ASTM D 4812
Izod Impact, notched, 23°C	36	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	5	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	155	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	94	°C	ASTM D 648
CTE, -30°C to 30°C, flow	9.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.04E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	147	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	84	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.4	-	ASTM D 792
Density	1.45	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.21	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	2 – 4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	2 – 4	%	ASTM D 955
Wear Factor Washer	8	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.23	-	ASTM D 3702 Modified: Manual
Static COF	0.16	-	ASTM D 3702 Modified: Manual

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.35	%	ISO 62
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2019 Copyright by SABIC. All rights reserved