

LNPT[™] LUBRICOMP[™] COMPOUND KL004

FULTON 404 & KL-4040
REGION EUROPE

DESCRIPTION

LNP LUBRICOMP KL004 compound is based on Acetal (POM) Copolymer resin containing 20% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION

Features	Wear resistant
Fillers	Unreinforced, PTFE
Polymer Types	Acetal (POM) Copolymer
Processing Techniques	Injection Molding

INDUSTRY

Building and Construction
Consumer
Electrical and Electronics
Industrial

SUB INDUSTRY

Building Component
Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Mobile Phone - Computer - Tablets
Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break, 5 mm/min	47	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	10	%	ISO 527
Tensile Strain, break, 5 mm/min	23	%	ISO 527
Tensile Modulus, 1 mm/min	2400	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	58	MPa	ISO 178
Flexural Strain, break, 2 mm/min	7	%	ISO 178
Flexural Modulus, 2 mm/min	1800	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	7	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	7	%	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	34	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	18	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	1100	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	600	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	1.1E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.11E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	98	°C	ISO 75/Af

© 2023 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS[™]

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL ⁽¹⁾			
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.97 – 2.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.97 – 2.5	%	ISO 294
Wear Factor Washer	10	10 ⁴ -10 in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.29	-	ASTM D3702 Modified: Manual
Static COF	0.15	-	ASTM D3702 Modified: Manual
Density	1.5	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.26	%	ISO 62
Melt Volume Rate, MVR at 190°C/5.0 kg	18 – 21	cm ³ /10 min	ISO 1133
FLAME CHARACTERISTICS ⁽³⁾			
UL Yellow Card Link	F45329-101344611	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
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	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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 NON-INFRINGEMENT 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.