LNP™ LUBRICOMP™ COMPOUND DFL22

DFL-4022
REGION ASIA

DESCRIPTION

LNP LUBRICOMP DFL22 is a compound based on Polycarbonate resin containing 10% Glass Fiber and 10% PTFE. Added features include: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20190717

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	72	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	68	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	4130	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	4140	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	71	MPa	ISO 527
Tensile Stress, break, 5 mm/min	67	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.3	%	ISO 527
Tensile Strain, break, 5 mm/min	5.8	%	ISO 527
Tensile Modulus, 1 mm/min	4150	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	118	MPa	ISO 178
Flexural Modulus, 2 mm/min	3900	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	736	J/m	ASTM D 4812
Izod Impact, notched, 23°C	144	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	23	J	ASTM D 3763
Multiaxial Impact	6	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	48	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	140	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.58E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.58E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.6E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, flow	5.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	140	°C	ISO 75/Af
PHYSICAL			
Density	1.34	g/cm³	ASTM D 792

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.4 – 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6 – 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.5	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.65	%	ISO 294
Wear Factor Washer	165	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.37	-	ASTM D 3702 Modified: Manual
Static COF	0.43	-	ASTM D 3702 Modified: Manual
Density	1.33	g/cm³	ISO 1183
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101344587	-	-
UL Recognized, 94V-1 Flame Class Rating	≥3	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) 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.

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