LNP™ LUBRICOMP™ COMPOUND SCP36

SCL-4536

DESCRIPTION

LNP LUBRICOMP SCP36 is a compound based on Nylon 12 containing 30% Carbon Fiber, 15% PTFE/Silicone. Added features of this grade include: Wear Resistant, Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20200109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1	%	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	178	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	16200	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	122	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1	%	ISO 527
Tensile Modulus, 1 mm/min	18160	MPa	ISO 527
Flexural Modulus, 2 mm/min	16030	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	508	J/m	ASTM D 4812
Izod Impact, notched, 23°C	82	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Instrumented Impact Total Energy, 23°C	10	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	34	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	178	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	173	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	4.1E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	177	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	169	°C	ISO 75/Af
Relative Temp Index, Elec [(1)]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [(1)]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [(1)]	65	°C	UL 746B
PHYSICAL			
Density	1.26	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.16	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.5	%	ASTM D 955
Wear Factor Washer	14	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Wear Factor Ring	0	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.47	-	ASTM D 3702 Modified: Manual
Static COF	0.33	-	ASTM D 3702 Modified: Manual

© 2020 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.24	%	ISO 62
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E207780-101282600	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	100 – 105	°C	
Drying Time	3 – 4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 280	°C	
Nozzle Temperature	250 – 270	°C	
Front - Zone 3 Temperature	260 – 280	°C	
Middle - Zone 2 Temperature	250 – 270	°C	
Rear - Zone 1 Temperature	240 – 260	°C	
Hopper Temperature	40 – 60	°C	
Mold Temperature	60 – 85	°C	

(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.

© 2020 Copyright by SABIC. All rights reserved