

Revision 20231109

# LNPTM LUBRICOMPTM COMPOUND RAL22

RAL-4022 REGION EUROPE

#### **DESCRIPTION**

LNP LUBRICOMP RAL22 compound is based on Nylon 6/6 resin containing 10% PTFE, 10% aramid fiber. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Aramid Fiber, PTFE
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

### TYPICAL PROPERTY VALUES

PROPERTIES TYPICAL VALUES UNITS TEST METHODS MECHANICAL<sup>(1)</sup> 72 MPa ISO 527 Tensile Stress, yield, 5 mm/min Tensile Stress, break, 5 mm/min 71 MPa ISO 527 7.4 ISO 527 Tensile Strain, yield, 5 mm/min % Tensile Modulus, 1 mm/min 3550 MPa ISO 527 Flexural Stress, yield, 2 mm/min 109 MPa ISO 178 106 Flexural Stress, break, 2 mm/min MPa ISO 178 Flexural Strain, break, 2 mm/min ISO 178 8.4 % Flexural Modulus, 2 mm/min 3400 MPa ISO 178 IMPACT (1) Izod Impact, unnotched 80\*10\*4 +23°C 48 kJ/m² ISO 180/1U Izod Impact, notched 80\*10\*4 +23°C 5 kJ/m² ISO 180/1A THERMAL (1) HDT/Af, 1.8 MPa Flatw 80\*10\*4 sp=64mm 193 °C ISO 75/Af PHYSICAL (1) Mold Shrinkage, flow (2) 0.9 - 1.3 % SABIC method Wear Factor Washer 13 10^-10 in^5-min/ft-lb-hr ASTM D3702 Modified: Manual Dynamic COF 0.54 ASTM D3702 Modified: Manual Static COF 0.45 ASTM D3702 Modified: Manual ISO 1183 Density 1.22 g/cm³

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## CHEMISTRY THAT MATTERS



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
INJECTION MOLDING (3)			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	275 – 290	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	80 – 95	°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) 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.

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