

LNP™ LUBRICOMP™ RAL23 compound

Polyamide 66

SABIC Innovative Plastics

Message:

LNP LUBRICOMP* RAL23 is a compound based on Nylon 66 resin containing Aramid Fiber, PTFE. Added features of this material include: Internally Lubricated.

Also known as: LNP* LUBRICOMP* Compound RAL-4023

Product reorder name: RAL23

General Information			
Filler / Reinforcement	Aramid fiber		
Additive	PTFE lubricant		
Features	Lubrication		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.24	g/cm ³	ASTM D792
--	1.23	g/cm ³	ISO 1183
Molding Shrinkage			
Flow: 24 hours	1.7 - 1.8	%	ASTM D955
Transverse flow: 24 hours	2.0 - 2.1	%	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	3680	MPa	ASTM D638
--	3800	MPa	ISO 527-2/1
Tensile Strength			
Fracture	89.6	MPa	ASTM D638
Fracture	85.0	MPa	ISO 527-2
Tensile Elongation			
Fracture	5.9	%	ASTM D638
Fracture	6.3	%	ISO 527-2
Flexural Modulus			
--	3940	MPa	ASTM D790
--	3500	MPa	ISO 178
Flexural Strength			
--	131	MPa	ASTM D790
--	107	MPa	ISO 178
Coefficient of Friction			
With self-dynamics	0.38		ASTM D3702 Modified
With Self-Static	0.32		ASTM D3702 Modified
Wear Factor - Washer	23.0	10 ⁻¹⁰ in ⁴ -min/ft-lb-hr	ASTM D3702 Modified

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	47	J/m	ASTM D256
23°C ²	4.0	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	530	J/m	ASTM D4812
23°C ³	37	kJ/m ²	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, unannealed, 64.0mm span ⁴	246	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	171	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span ⁵	160	°C	ISO 75-2/Af
Linear thermal expansion coefficient			
Flow: -40 to 40°C	6.7E-5	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	6.8E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	9.7E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	9.8E-5	cm/cm/°C	ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.15 - 0.25	%	
Rear Temperature	266 - 277	°C	
Middle Temperature	282 - 293	°C	
Front Temperature	293 - 304	°C	
Processing (Melt) Temp	277 - 288	°C	
Mold Temperature	82.2 - 93.3	°C	
Back Pressure	0.172 - 0.344	MPa	
Screw Speed	30 - 60	rpm	
NOTE			
1.	50 mm/min		
2.	80*10*4		
3.	80*10*4		
4.	80*10*4 mm		
5.	80*10*4 mm		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

