+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

LNP™ LUBRICOMP™ RAL22 compound

General Information

Product Description

LNP LUBRICOMP* RAL22 is a compound based on Nylon 66 resin containing 10% PTFE, 10% Aramid. Added features of this material include: Wear Resistant.

Also known as: LNP* LUBRICOMP* Compound RAL-4022
Product reorder name: RAL22

General

Filler / Reinforcement	• Aramid Fiber, 10% Filler by Weight	
Additive	• PTFE Lubricant (10%)	
Features	• Good Wear Resistance	• Lubricated
Processing Method	• Injection Molding	

ASTM and ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.22		ASTM D792
Density	1.22	g/cm³	ISO 1183
Molding Shrinkage - Flow (24 hr)	0.019	in/in	ASTM D955
Molding Shrinkage - Across Flow (24 hr)	0.020	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 24 hr	2.0	%	
Flow : 24 hr	1.9	%	
Water Absorption (24 hr, 50% RH)	0.72	%	ASTM D570
Water Absorption (Equilibrium, 73°F, 50% RH)	1.2	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	500000	psi	ASTM D638
Tensile Modulus	508000	psi	ISO 527-2/1
Tensile Strength (Break)	11800	psi	ASTM D638
Tensile Stress (Break)	11500	psi	ISO 527-2
Tensile Elongation (Break)	8.1	%	ASTM D638
Tensile Strain (Break)	9.5	%	ISO 527-2
Flexural Modulus	430000	psi	ASTM D790
Flexural Modulus	508000	psi	ISO 178
Flexural Strength	16400	psi	ASTM D790
Flexural Strength	17000	psi	ISO 178

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

LNP™ LUBRICOMP™ RAL22 compound
SABIC Innovative Plastics - Polyamide 66

Mechanical	Nominal Value	Unit	Test Method
Coefficient of Friction			ASTM D3702 Modified
vs. Itself - Dynamic	0.55		
vs. Itself - Static	0.46		
Wear Factor - Washer	13.0	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F)	2.5	ft·lb/in	ASTM D256
Notched Izod Impact Strength [3] (73°F)	2.8	ft·lb/in²	ISO 180/1A
Unnotched Izod Impact (73°F)	14	ft·lb/in	ASTM D4812
Unnotched Izod Impact Strength [3] (73°F)	23	ft·lb/in²	ISO 180/1U
Instrumented Dart Impact (73°F, Energy at Peak Load)	56.6	in·lb	ASTM D3763
Multi-Axial Instrumented Impact Energy	1.05	ft·lb	ISO 6603-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, 0.126 in	480	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.126 in	389	°F	
Heat Deflection Temperature [4]			ISO 75-2/Af
264 psi, Unannealed, 2.52 in Span	379	°F	
CLTE - Flow (-40 to 104°F)	4.0E-5	in/in/°F	ASTM E831
CLTE - Flow (-40 to 104°F)	4.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (-40 to 104°F)	4.5E-5	in/in/°F	ASTM E831
CLTE - Transverse (-40 to 104°F)	4.6E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.15 to 0.25	%
Rear Temperature	510 to 530	°F
Middle Temperature	540 to 560	°F
Front Temperature	560 to 580	°F
Processing (Melt) Temp	530 to 550	°F
Mold Temperature	180 to 200	°F
Back Pressure	25.0 to 50.0	psi
Screw Speed	30 to 60	rpm

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 2.0 in/min

[3] 80*10*4

[4] 80*10*4 mm