



LNP™ LUBRICOMP™ Compound RAP22

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound RAL-4522

Product reorder name: RAP22

LNP LUBRICOMP RAP22 is a compound based on Nylon 66 resin containing 10% Aramid, 10% PTFE/Silicone. Added feature of this grade includes: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	520	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	500	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	34600	kgf/cm ²	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	33200	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	71	MPa	ISO 527
Tensile Stress, break, 5 mm/min	71	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.9	%	ISO 527
Tensile Strain, break, 5 mm/min	6	%	ISO 527
Tensile Modulus, 1 mm/min	3420	MPa	ISO 527
Flexural Stress	103	MPa	ISO 178
Flexural Modulus, 2 mm/min	3250	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	34	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Multiaxial Impact	9	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	47	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	24	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	189	°C	ASTM D 648
CTE, -30°C to 30°C, flow	4.9E-05	1/°C	ASTM D 696



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, xflow	8.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	224	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	100	°C	ISO 75/Af
PHYSICAL			
Density	1.2	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.71	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2 - 4	%	ASTM D 955
Wear Factor Washer	23	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	-1 - -1	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.37	-	ASTM D 3702 Modified
Static COF	0.26	-	ASTM D 3702 Modified
Density	1.2	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.1	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
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