



LNP™ LUBRICOMP™ Compound KFI12

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound KFL-4412

Product reorder name: KFI12

LNP LUBRICOMP™ KFI12 is a compound based on Acetal Copolymer resin containing 10% Glass Fiber, 2% Silicone. Added feature of this grade is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	630	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	570	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	50100	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	920	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	41500	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	62	MPa	ISO 527
Tensile Stress, break, 5 mm/min	58	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.3	%	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	4780	MPa	ISO 527
Flexural Stress	91	MPa	ISO 178
Flexural Modulus, 2 mm/min	4140	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	42	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Multiaxial Impact	20	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	57	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*3 +23°C	26	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	163	°C	ASTM D 648



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THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	161	°C	ASTM D 648
CTE, -30°C to 30°C, flow	8.3E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	9.E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	162	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	159	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.44	-	ASTM D 792
Density	1.44	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.25	%	ASTM D 570
Moisture Absorption (23°C / 50% RH)	0.34	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Melt Temperature	200 - 215	°C
Front - Zone 3 Temperature	210 - 220	°C
Middle - Zone 2 Temperature	195 - 205	°C
Rear - Zone 1 Temperature	175 - 190	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm