



LNP™ LUBRICOMP™ Compound UCP36S

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound UCL-4536 HS

Product reorder name: UCP36S

LNP™ LUBRICOMP™ UCP36S is a compound based on PPA resin containing 30% Carbon Fiber, 15% PTFE/Silicone. Added features of this grade include: Heat Stabilized, Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2390	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.3	%	ASTM D 638
Tensile Modulus, 5 mm/min	268900	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	3320	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	228400	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	229	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	26090	MPa	ISO 527
Flexural Stress	321	MPa	ISO 178
Flexural Modulus, 2 mm/min	22230	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	50	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	6	cm-kgf/cm	ASTM D 256
Multiaxial Impact	19	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	57	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	35	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	278	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	259	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	280	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.41	-	ASTM D 792



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Density	1.41	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.26	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.11	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.72	%	ASTM D 955
Wear Factor Washer	14	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	0	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.35	-	ASTM D 3702 Modified
Static COF	0.32	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.4	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15	%
Melt Temperature	315 - 330	°C
Front - Zone 3 Temperature	325 - 340	°C
Middle - Zone 2 Temperature	315 - 325	°C
Rear - Zone 1 Temperature	310 - 320	°C
Mold Temperature	150 - 170	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm