



LNP™ LUBRICOMP™ Compound HFG25Z

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound HFL-4325

Product reorder name: HFG25Z

LNP™ LUBRICOMP™ HFG25Z is a compound based on Nylon 11 resin containing 25% Glass Fiber, 10% Graphite. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	1550	kgf/cm ²	ASTM D 638
Tensile Stress, break	1550	kgf/cm ²	ASTM D 638
Tensile Strain, yield	2.7	%	ASTM D 638
Tensile Strain, break	2.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	112400	kgf/cm ²	ASTM D 638
Flexural Stress	980	kgf/cm ²	ASTM D 790
Flexural Modulus	56200	kgf/cm ²	ASTM D 790
Tensile Stress, yield	76	MPa	ISO 527
Tensile Stress, break	76	MPa	ISO 527
Tensile Strain, yield	2.2	%	ISO 527
Tensile Strain, break	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	6830	MPa	ISO 527
Flexural Stress	352	MPa	ISO 178
Flexural Modulus	18200	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	46	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	7	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	153	cm-kgf	ASTM D 3763
Multiaxial Impact	33	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	182	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	171	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.18E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.42E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.5E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	182	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	166	°C	ISO 75/Af
PHYSICAL			
Density	1.3	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8 - 1	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.47	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.93	%	ISO 294
Wear Factor Washer	58	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.41	-	ASTM D 3702 Modified
Static COF	0.45	-	ASTM D 3702 Modified
Density	1.3	g/cm ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15	%
Melt Temperature	225 - 260	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	230 - 245	°C
Rear - Zone 1 Temperature	200 - 210	°C
Mold Temperature	45 - 55	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm