

LNP* Lubricomp* Compound DX98306H

Asia Pacific: COMMERCIAL

Also known as: PDX-D-98306 LE EES Product Reorder Name: DX98306H

LNP* Lubricomp* DX98306H is a compound based on Polycarbonate resin containing PTFE, Silicone. Added features of this material include: Internally Lubricated, Low Extractible.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	51	MPa	ASTM D 638
Tensile Stress, break	42	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	0	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	43	MPa	ASTM D 638
Tensile Strain, yield	5.3	%	ASTM D 638
Tensile Strain, break	32.8	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	0	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638
Tensile Modulus, 5 mm/min	5090	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	85	MPa	ASTM D 790
Flexural Modulus	2060	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5010	MPa	ASTM D 790
Tensile Stress, yield	51	MPa	ISO 527
Tensile Stress, break	43	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	0	MPa	ISO 527
Tensile Stress, break, 5 mm/min	48	MPa	ISO 527
Tensile Strain, yield	5.3	%	ISO 527
Tensile Strain, break	38.2	%	ISO 527
Tensile Strain, yield, 5 mm/min	0	%	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	2140	MPa	ISO 527
Flexural Stress	71	MPa	ISO 178
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus	2100	MPa	ISO 178
Flexural Modulus, 2 mm/min	5120	MPa	ISO 178
ІМРАСТ	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1767	J/m	ASTM D 4812
Izod Impact, notched, 23°C	154	J/m	ASTM D 256
Izod Impact, notched, -30°C	69	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	34	J	ASTM D 3763
Multiaxial Impact	32	J	ISO 6603
Instrumented Impact Total Energy, 23°C	0	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	180	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m²	ISO 180/1A

Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	5	kJ/m²	ISO 179/1eA
THERMAL	Value	Unit	Standard
Vicat Softening Temp, Rate B/50	141	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	132	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	122	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.56E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.38E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.4E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	141	°C	ISO 306
Vicat Softening Temp, Rate B/120	145	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	133	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	123	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.48	-	ASTM D 792
Density	1.29	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.3 - 0.5	%	SABIC Method
Mold Shrinkage, flow, 24 hrs	0.5 - 0.7	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6 - 0.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.64	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.74	%	ISO 294
Melt Flow Rate, 300°C/1.2 kgf	8.5	g/10 min	ASTM D 1238
Wear Factor Washer	21	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.37	-	ASTM D 3702 Modified
Static COF	0.32	-	ASTM D 3702 Modified
Density	1.29	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.2	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.1	%	ISO 62
Melt Volume Rate, MVR at 300°C/1.2 kg	6	cm ³ /10 min	ISO 1133
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	0.7	mm	UL 94

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	300 - 315	°C
Front - Zone 3 Temperature	310 - 320	°C
Middle - Zone 2 Temperature	305 - 315	°C
Rear - Zone 1 Temperature	295 - 305	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/24/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded

samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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