



LNP* Lubricomp* Compound SFP36

Americas: COMMERCIAL

Also known as: LUBRICOMP SFL-4536

Product Reorder Name: SFP36

LNP* Lubricomp* SFP36 is a Nylon 12 compound containing Glass Fiber and PTFE/Silicone. Characteristics of this grade are Internally Lubricated.

Property

ensile Stress, yld, Type I, 5 mm/min ensile Stress, brk, Type I, 5 mm/min ensile Stress, brk, Type I, 5 mm/min ensile Stress, brk, Type I, 5 mm/min ensile Strain, yld, Type I, 5 mm/min ensile Strain, yld, Type I, 5 mm/min 3.2 % ASTM D 638 ensile Strain, plk, Type I, 5 mm/min 3.2 % ASTM D 638 ensile Modulus, 50 mm/min 9060 MPa ASTM D 638 elexural Stress, yld, 1.3 mm/min, 50 mm span 178 MPa ASTM D 790 lexural Stress, brk, 1.3 mm/min, 50 mm span 176 MPa ASTM D 790 lexural Stress, brk, 1.3 mm/min, 50 mm span 175 MPa ASTM D 790 ensile Stress, yled, 5 mm/min 129 MPa ISO 527 ensile Stress, break, 5 mm/min 129 MPa ISO 527 ensile Strain, pield, 5 mm/min 129 MPa ISO 527 ensile Strain, pield, 5 mm/min 129 MPa ISO 527 ensile Strain, pield, 5 mm/min 129 MPa ISO 527 ensile Strain, pield, 5 mm/min 129 MPa ISO 527 ensile Strain, pield, 5 mm/min 129 MPa ISO 527 ensile Modulus, 1 mm/min 120 MPa ISO 527 ensile Modulus, 1 mm/min 120 MPa ISO 527 ensile Modulus, 2 mm/min 120 MPa ISO 527	TYPICAL PROPERTIES (1)			
ASTM D 638 ASTM D 790 AST	MECHANICAL	Value	Unit	Standard
Sensile Strain, yld, Type I, 5 mm/min 3.2 % ASTM D 638 sensile Strain, brk, Type I, 5 mm/min 3.2 % ASTM D 638 sensile Modulus, 50 mm/min 9060 MPa ASTM D 638 sensile Modulus, 50 mm/min 9060 MPa ASTM D 638 sensile Modulus, 50 mm/min 9060 MPa ASTM D 638 sensile Modulus, 50 mm/min 9060 MPa ASTM D 790 sexual Stress, brk, 1.3 mm/min, 50 mm span 176 MPa ASTM D 790 sexual Stress, brk, 1.3 mm/min, 50 mm span 176 MPa ASTM D 790 sensile Stress, break, 5 mm/min 129 MPa ISO 527 sensile Stress, break, 5 mm/min 129 MPa ISO 527 sensile Stress, break, 5 mm/min 129 MPa ISO 527 sensile Stress, break, 5 mm/min 129 MPa ISO 527 sensile Strain, break, 5 mm/min 129 MPa ISO 527 sensile Strain, break, 5 mm/min 9070 MPa ISO 527 sensile Modulus, 1 mm/min 9070 MPa ISO 527 sensile Modulus, 2 mm/min 9070 MPa ISO 527 sensile Modulus, 2 mm/min 9070 MPa ISO 527 sensile Modulus, 2 mm/min 9070 MPa ISO 178 secured Modulus, 2 mm/min 7920 MPa ISO 178 secured Modulus, 2 mm/min 9070 MPa ISO 178 secured Mpa ISO	Tensile Stress, yld, Type I, 5 mm/min	125	MPa	ASTM D 638
Sensile Strain, brk, Type I, 5 mm/min 3.2	Tensile Stress, brk, Type I, 5 mm/min	117	MPa	ASTM D 638
ASTM D 638 ASTM D 790 ASTM D 648 ASTM D 790 ASTM D 648 ASTM D 790 ASTM D 790 ASTM D 648 ASTM D 790 AST	Tensile Strain, yld, Type I, 5 mm/min	3.2	%	ASTM D 638
Internal Stress, yld, 1.3 mm/min, 50 mm span 178	Tensile Strain, brk, Type I, 5 mm/min	3.2	%	ASTM D 638
Internation 176 MPa	Tensile Modulus, 50 mm/min	9060	MPa	ASTM D 638
Rexural Modulus, 1.3 mm/min, 50 mm span 7510 MPa	Flexural Stress, yld, 1.3 mm/min, 50 mm span	178	MPa	ASTM D 790
Sensile Stress, yield, 5 mm/min	Flexural Stress, brk, 1.3 mm/min, 50 mm span	176	MPa	ASTM D 790
Sensile Stress, break, 5 mm/min 129 MPa	Flexural Modulus, 1.3 mm/min, 50 mm span	7510	MPa	ASTM D 790
Sensile Strain, yield, 5 mm/min 2.9	Tensile Stress, yield, 5 mm/min	129	MPa	ISO 527
ISO 527 ISO	Tensile Stress, break, 5 mm/min	129	MPa	ISO 527
Sensile Modulus, 1 mm/min 9070 MPa ISO 527 Sexural Stress 191 MPa ISO 178 Sexural Modulus, 2 mm/min 7920 MPa ISO 178 Sexural Modulus, 2 mm/min 7920 MPa ISO 178 Sexural Modulus, 2 mm/min 7920 MPa ISO 178 MPACT Value Unit Standard Sexural Modulus, 2 mm/min 7920 MPa ISO 178 MPACT Value Unit Standard Sexural Modulus, 2 mm/min 7920 MPa ISO 178 MPACT Value Unit Standard Sexural Modulus, 2 mm/min 7920 MPa ISO 180 Sexural Mapact, unnotched, 23°C 146 J/m ASTM D 256 Multiaxial Impact 3 J ISO 6603 Sexural Mapact, unnotched Impact Total Energy, 23°C 9 J ASTM D 3763 Sexural Mapact, unnotched 80*10*4 + 23°C 58 kJ/m² ISO 180/1U Sexural Mapact, unnotched 80*10*4 + 23°C 14 kJ/m² ISO 180/1U Sexural Mapact, unnotched 80*10*4 + 23°C 14 kJ/m² ISO 180/1A MERMAL Value Unit Standard MPACT 180 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 MDT, 0.45 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 MDT, 1.82 MPa, 3.2 mm, unannealed 177 °C ISO 75/Bf MDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Bf MDT/Bf, 1.8 MPa, 2 MPa, 3 MPa, 2 MPa, 3 MPa,	Tensile Strain, yield, 5 mm/min	2.9	%	ISO 527
Iso 178	Tensile Strain, break, 5 mm/min	3	%	ISO 527
Isoural Modulus, 2 mm/min 7920 MPa Iso 178 MPACT	Tensile Modulus, 1 mm/min	9070	MPa	ISO 527
MPACT Value Unit Standard 2cd Impact, unnotched, 23°C 1000 J/m ASTM D 4812 2cd Impact, notched, 23°C 146 J/m ASTM D 256 Multiaxial Impact 3 J ISO 6603 Instrumented Impact Total Energy, 23°C 9 J ASTM D 3763 2cd Impact, unnotched 80*10*4 +23°C 58 kJ/m² ISO 180/1U 2cd Impact, notched 80*10*4 +23°C 14 kJ/m² ISO 180/1A THERMAL Value Unit Standard IDT, 0.45 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 IDT, 1.82 MPa, 3.2mm, unannealed 172 °C ASTM D 648 IDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 177 °C ISO 75/Bf IDT/Bf, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af VHYSICAL Value Unit Standard PHYSICAL 1.39 - ASTM D 792 Mold Shrinkage, flow, 24 hrs 0.1 - 0.3 % ASTM D 955 Mold Shrinkage, xflow, 24 hrs 0.7 -	Flexural Stress	191	MPa	ISO 178
zood Impact, unnotched, 23°C 1000 J/m ASTM D 4812 zood Impact, notched, 23°C 146 J/m ASTM D 256 Multiaxial Impact 3 J ISO 6603 Instrumented Impact Total Energy, 23°C 9 J ASTM D 3763 Izod Impact, unnotched 80*10*4 +23°C 58 kJ/m² ISO 180/1U Izod Impact, notched 80*10*4 +23°C 14 kJ/m² ISO 180/1A IHERMAL Value Unit Standard IDT, 0.45 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 IDT, 1.82 MPa, 3.2mm, unannealed 172 °C ASTM D 648 IDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 177 °C ISO 75/Bf IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/SICAL Value Unit Standard PHYSICAL Value Unit Standard Percentic Gravity 1.39 - ASTM D 792 Mold Shrinkage, flow, 24 hrs 0.1 - 0.3 % ASTM D 955 Mold Shrinkage, xflow, 24 hrs 0.7 - 0.9 % ASTM D 955	Flexural Modulus, 2 mm/min	7920	MPa	ISO 178
zod Impact, notched, 23°C 146 J/m ASTM D 256 Multiaxial Impact 3 J ISO 6603 Instrumented Impact Total Energy, 23°C 9 J ASTM D 3763 Izod Impact, unnotched 80*10*4 +23°C 58 kJ/m² ISO 180/1U Izod Impact, notched 80*10*4 +23°C 14 kJ/m² ISO 180/1A I*HERMAL Value Unit Standard IDT, 0.45 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 IDT, 1.82 MPa, 3.2mm, unannealed 172 °C ASTM D 648 IDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 177 °C ISO 75/Bf IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 <	IMPACT	Value	Unit	Standard
Multiaxial Impact 3 J ISO 6603 Instrumented Impact Total Energy, 23°C 9 J ASTM D 3763 Instrumented Impact, unnotched 80*10*4 +23°C 58 kJ/m² ISO 180/1U Iso 180/1A ISO 180/1A ISO 180/1A Intermal Value Unit Standard IDT, 0.45 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 IDT, 1.82 MPa, 3.2mm, unannealed 172 °C ASTM D 648 IDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 177 °C ISO 75/Bf IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C <t< td=""><td>Izod Impact, unnotched, 23°C</td><td>1000</td><td>J/m</td><td>ASTM D 4812</td></t<>	Izod Impact, unnotched, 23°C	1000	J/m	ASTM D 4812
Strumented Impact Total Energy, 23°C 9	Izod Impact, notched, 23°C	146	J/m	ASTM D 256
Seed Impact, unnotched 80*10*4 +23°C 58 kJ/m² ISO 180/1U 20d Impact, notched 80*10*4 +23°C 14 kJ/m² ISO 180/1A 20d Impact, notched 80*10*4 +23°C 14 kJ/m² ISO 180/1A 20d Impact, notched 80*10*4 +23°C 14 kJ/m² ISO 180/1A 20d Impact, notched 80*10*4 +23°C 150 180/1A 20d Impact, notched 80*10*4 +23°C 20d Impact, notched 80*10*4 20d Im	Multiaxial Impact	3	J	ISO 6603
14 kJ/m² ISO 180/1A ISO 1	Instrumented Impact Total Energy, 23°C	9	J	ASTM D 3763
THERMAL Value Unit Standard IDT, 0.45 MPa, 3.2 mm, unannealed 177 °C ASTM D 648 IDT, 1.82 MPa, 3.2mm, unannealed 172 °C ASTM D 648 IDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm 177 °C ISO 75/Bf IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 169 °C ISO 75/Af PHYSICAL Value Unit Standard Specific Gravity 1.39 - ASTM D 792 Mold Shrinkage, flow, 24 hrs 0.1 - 0.3 % ASTM D 955 Mold Shrinkage, xflow, 24 hrs 0.7 - 0.9 % ASTM D 955	Izod Impact, unnotched 80*10*4 +23°C	58	kJ/m²	ISO 180/1U
IDT, 0.45 MPa, 3.2 mm, unannealed	Izod Impact, notched 80*10*4 +23°C	14	kJ/m²	ISO 180/1A
IDT, 1.82 MPa, 3.2mm, unannealed	THERMAL	Value	Unit	Standard
IDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm				4.0T14.D.040
IDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	HDT, 0.45 MPa, 3.2 mm, unannealed	177	°C	ASTM D 648
PHYSICAL Value Unit Standard Specific Gravity 1.39 - ASTM D 792 Mold Shrinkage, flow, 24 hrs 0.1 - 0.3 % ASTM D 955 Mold Shrinkage, xflow, 24 hrs 0.7 - 0.9 % ASTM D 955	HDT, 0.45 MPa, 3.2 mm, unannealed HDT, 1.82 MPa, 3.2mm, unannealed		_	
Specific Gravity 1.39 - ASTM D 792 Mold Shrinkage, flow, 24 hrs 0.1 - 0.3 % ASTM D 955 Mold Shrinkage, xflow, 24 hrs 0.7 - 0.9 % ASTM D 955		172	°C	ASTM D 648
Mold Shrinkage, flow, 24 hrs 0.1 - 0.3 % ASTM D 955 Mold Shrinkage, xflow, 24 hrs 0.7 - 0.9 % ASTM D 955	HDT, 1.82 MPa, 3.2mm, unannealed	172 177	°C	ASTM D 648 ISO 75/Bf
Mold Shrinkage, xflow, 24 hrs 0.7 - 0.9 % ASTM D 955	HDT, 1.82 MPa, 3.2mm, unannealed HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	172 177 169	°C °C	ASTM D 648 ISO 75/Bf ISO 75/Af
	HDT, 1.82 MPa, 3.2mm, unannealed HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	172 177 169 Value	°C °C	ASTM D 648 ISO 75/Bf ISO 75/Af Standard
rensity 1.38 g/cm³ ISO 1183	HDT, 1.82 MPa, 3.2mm, unannealed HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL	172 177 169 Value 1.39	°C °C C Unit	ASTM D 648 ISO 75/Bf ISO 75/Af Standard ASTM D 792
	HDT, 1.82 MPa, 3.2mm, unannealed HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm PHYSICAL Specific Gravity	172 177 169 Value 1.39 0.1 - 0.3	°C °C Unit -	ASTM D 648 ISO 75/Bf ISO 75/Af Standard ASTM D 792 ASTM D 955

Source GMD, last updated:2009/04/21

Processing

Injection Molding	Value	Unit
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	225 - 240	°C
Front - Zone 3 Temperature	225 - 240	°C
Middle - Zone 2 Temperature	220 - 230	°C
Rear - Zone 1 Temperature	215 - 225	°C
Mold Temperature	70 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:2009/04/21

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.

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- (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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