



## LNP\* Thermocomp\* Compound JF006LXZ

**Americas: COMMERCIAL** 

Also known as: JF-1006 LE Product Reorder Name: JF006LXZ

LNP\* Thermocomp\* JF006LXZ is a compound based on Polyethersulfone resin containing Glass Fiber. Added features of this material include: Low Extractible.

## **Property**

MECHANICAL   Value   Unit   Standard	TYPICAL PROPERTIES (1)			
Tensile Strain, break	MECHANICAL	Value	Unit	Standard
Tensile Modulus, 50 mm/min   9790   MPa   ASTM D 638     Flexural Stress   172   MPa   ASTM D 790     Flexural Modulus   9230   MPa   ASTM D 790     Flexural Modulus   9230   MPa   ASTM D 790     Flexural Modulus   9230   MPa   ASTM D 790     Tensile Stress, break   99   MPa   ISO 527     Tensile Stress, break   1.4   %   ISO 527     Tensile Modulus, 1 mm/min   10190   MPa   ISO 178     Telexural Modulus   9240   MPa   ISO 180     Telexural Modulus   180   Telexural Modulus   180   Telexural Modulus     Telexural Modulus   180   Telexural Modulus     Telexural Modulus   180	Tensile Stress, break	113	MPa	ASTM D 638
Flexural Stress 172 MPa ASTM D 790 Flexural Modulus 9230 MPa ASTM D 790 Tensile Stress, break 999 MPa ISO 527 Tensile Stress, break 1,4 % ISO 527 Tensile Strain, break 1,4 % ISO 527 Tensile Modulus, 1 mm/min 10190 MPa ISO 527 Tensile Modulus, 1 mm/min 10190 MPa ISO 527 Tensile Modulus, 1 mm/min 10190 MPa ISO 527 Tensile Modulus 1050 Tensile Modulus ISO 178 Telexural Modulus 9240 MPa ISO 178 Telexural Modulus 1050 Tensile Mod	Tensile Strain, break	1.8	%	ASTM D 638
Plexural Modulus   9230   MPa	Tensile Modulus, 50 mm/min	9790	MPa	ASTM D 638
Pensile Stress, break   99   MPa   ISO 527	Flexural Stress	172	MPa	ASTM D 790
Tensile Strain, break	Flexural Modulus	9230	MPa	ASTM D 790
Tensile Modulus, 1 mm/min         10190         MPa         ISO 527           Flexural Stress         222         MPa         ISO 178           Flexural Modulus         9240         MPa         ISO 178           IMPACT         Value         Unit         Standard           Izod Impact, unnotched, 23°C         427         J/m         ASTM D 4812           Izod Impact, notched, 23°C         58         J/m         ASTM D 256           Instrumented Impact Energy @ peak, 23°C         13         J         ASTM D 3763           Multiaxial Impact         3         J         ISO 6603           Izod Impact, unnotched 80*10*4 +23°C         29         kJ/m²         ISO 180/1U           Izod Impact, notched 80*10*4 +23°C         6         kJ/m²         ISO 180/1A           THERMAL         Value         Unit         Standard           HDT, 0.45 MPa, 3.2 mm, unannealed         217         °C         ASTM D 648           HDT, 1.82 MPa, 3.2mm, unannealed         212         °C         ASTM D 648           CTE, -40°C to 40°C, flow         3.06E-05         1/°C         ASTM E 831           CTE, -40°C to 40°C, flow         3.0E-05         1/°C         ISO 11359-2           CTE, -40°C to 40°C, flow         3.0E-05	Tensile Stress, break	99	MPa	ISO 527
Flexural Stress 222 MPa ISO 178 Flexural Modulus 9240 MPa ISO 178 IMPACT Value Unit Standard Izod Impact, unnotched, 23°C 427 J/m ASTM D 4812 Izod Impact, notched, 23°C 58 J/m ASTM D 256 Instrumented Impact Energy @ peak, 23°C 13 J STM D 3763 Multiaxial Impact S 3 J ISO 6603 Izod Impact, unnotched 80°10°4 +23°C 29 kJ/m² ISO 180/1U Izod Impact, notched 80°10°4 +23°C 29 kJ/m² ISO 180/1U Izod Impact, notched 80°10°4 +23°C 29 kJ/m² ISO 180/1U Izod Impact, notched 80°10°4 +23°C 66 kJ/m² ISO 180/1A THERMAL Value Unit Standard HDT, 0.45 MPa, 3.2 mm, unannealed 217 °C ASTM D 648 HDT, 0.45 MPa, 3.2 mm, unannealed 212 °C ASTM D 648 CTE, -40°C to 40°C, flow 3.06E-05 1/°C ASTM E 831 CTE, -40°C to 40°C, flow 3.01E-05 1/°C ISO 11359-2 CTE, -40°C to 40°C, xflow 3.64E-05 1/°C ISO 11359-2 CTE, -40°C to	Tensile Strain, break	1.4	%	ISO 527
Perental Modulus   9240   MPa   ISO 178   MPACT   Value   Unit   Standard   Value   Unit   Standard   Value   Unit   Standard   Value   Unit   Standard   Value   Unit   Value   Unit   Value   Unit   Value	Tensile Modulus, 1 mm/min	10190	MPa	ISO 527
MPACT   Value   Unit   Standard   20 ct   March   Ma	Flexural Stress	222	MPa	ISO 178
Zzod Impact, unnotched, 23°C	Flexural Modulus	9240	MPa	ISO 178
Zod Impact, notched, 23°C   58	IMPACT	Value	Unit	Standard
Instrumented Impact Energy @ peak, 23°C  Multiaxial Impact  3 J ISO 6603  Multiaxial Impact, unnotched 80*10*4 +23°C  Multiaxial Impact, unnotched 80*10*4 +23°C  Multiaxial Impact, unnotched 80*10*4 +23°C  Multiaxial Impact, notched 80*10*4 +23°C  Multiaxial Impact, unnotched 80*10*4 +23°C  Multiaxial Impact  Multiaxial Im	Izod Impact, unnotched, 23°C	427	J/m	ASTM D 4812
Multiaxial Impact    Society   Socie	Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Iso 180/1U   Iso 180/1A   Iso	Instrumented Impact Energy @ peak, 23°C	13	J	ASTM D 3763
Iso 180/1A   Iso	Multiaxial Impact	3	J	ISO 6603
THERMAL         Value         Unit         Standard           HDT, 0.45 MPa, 3.2 mm, unannealed         217         °C         ASTM D 648           HDT, 1.82 MPa, 3.2mm, unannealed         212         °C         ASTM D 648           CTE, -40°C to 40°C, flow         3.06E-05         1/°C         ASTM E 831           CTE, -40°C to 40°C, xflow         3.01E-05         1/°C         ASTM E 831           CTE, -40°C to 40°C, flow         3.01E-05         1/°C         ISO 11359-2           CTE, -40°C to 40°C, xflow         3.64E-05         1/°C         ISO 11359-2           PHYSICAL         Value         Unit         Standard           Density         1.61         g/cm³         ASTM D 792           Moisture Absorption, 50% RH, 24 hrs         0.3         %         ASTM D 955           Mold Shrinkage, flow, 24 hrs         0.7         %         ASTM D 955           Mold Shrinkage, flow, 24 hrs         0.25         %         ISO 294           Mold Shrinkage, xflow, 24 hrs         0.69         %         ISO 294	Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m²	ISO 180/1U
HDT, 0.45 MPa, 3.2 mm, unannealed  HDT, 1.82 MPa, 3.2mm, unannealed  CTE, -40°C to 40°C, flow  C	Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
HDT, 1.82 MPa, 3.2mm, unannealed  CTE, -40°C to 40°C, flow  3.06E-05  1/°C  ASTM E 831  CTE, -40°C to 40°C, xflow  3.06E-05  1/°C  ASTM E 831  CTE, -40°C to 40°C, xflow  3.01E-05  1/°C  ASTM E 831  CTE, -40°C to 40°C, flow  3.01E-05  1/°C  ISO 11359-2  CTE, -40°C to 40°C, xflow  3.64E-05  1/°C  ISO 11359-2  CTE, -40°C to 40°C, xflow  Unit  Standard  Density  1.61  g/cm³  ASTM D 792  Moisture Absorption, 50% RH, 24 hrs  0.3  Mold Shrinkage, flow, 24 hrs  0.2  Mold Shrinkage, xflow, 24 hrs  0.25  Mold Shrinkage, xflow, 24 hrs  0.294  Mold Shrinkage, xflow, 24 hrs  0.294  Mold Shrinkage, xflow, 24 hrs  0.294	THERMAL	Value	Unit	Standard
CTE, -40°C to 40°C, flow       3.06E-05       1/°C       ASTM E 831         CTE, -40°C to 40°C, xflow       3.6E-05       1/°C       ASTM E 831         CTE, -40°C to 40°C, flow       3.01E-05       1/°C       ISO 11359-2         CTE, -40°C to 40°C, xflow       3.64E-05       1/°C       ISO 11359-2         PHYSICAL       Value       Unit       Standard         Density       1.61       g/cm³       ASTM D 792         Moisture Absorption, 50% RH, 24 hrs       0.3       %       ASTM D 570         Mold Shrinkage, flow, 24 hrs       0.2       %       ASTM D 955         Mold Shrinkage, xflow, 24 hrs       0.7       %       ASTM D 955         Mold Shrinkage, flow, 24 hrs       0.25       %       ISO 294         Mold Shrinkage, xflow, 24 hrs       0.69       %       ISO 294	HDT, 0.45 MPa, 3.2 mm, unannealed	217	°C	ASTM D 648
CTE, -40°C to 40°C, xflow       3.6E-05       1/°C       ASTM E 831         CTE, -40°C to 40°C, flow       3.01E-05       1/°C       ISO 11359-2         CTE, -40°C to 40°C, xflow       3.64E-05       1/°C       ISO 11359-2         PHYSICAL       Value       Unit       Standard         Density       1.61       g/cm³       ASTM D 792         Moisture Absorption, 50% RH, 24 hrs       0.3       %       ASTM D 570         Mold Shrinkage, flow, 24 hrs       0.2       %       ASTM D 955         Mold Shrinkage, xflow, 24 hrs       0.7       %       ASTM D 955         Mold Shrinkage, flow, 24 hrs       0.25       %       ISO 294         Mold Shrinkage, xflow, 24 hrs       0.69       %       ISO 294	HDT, 1.82 MPa, 3.2mm, unannealed	212	°C	ASTM D 648
CTE, -40°C to 40°C, flow       3.01E-05       1/°C       ISO 11359-2         CTE, -40°C to 40°C, xflow       3.64E-05       1/°C       ISO 11359-2         PHYSICAL       Value       Unit       Standard         Density       1.61       g/cm³       ASTM D 792         Moisture Absorption, 50% RH, 24 hrs       0.3       %       ASTM D 570         Mold Shrinkage, flow, 24 hrs       0.2       %       ASTM D 955         Mold Shrinkage, xflow, 24 hrs       0.7       %       ASTM D 955         Mold Shrinkage, flow, 24 hrs       0.25       %       ISO 294         Mold Shrinkage, xflow, 24 hrs       0.69       %       ISO 294	CTE, -40°C to 40°C, flow	3.06E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow       3.64E-05       1/°C       ISO 11359-2         PHYSICAL       Value       Unit       Standard         Density       1.61       g/cm³       ASTM D 792         Moisture Absorption, 50% RH, 24 hrs       0.3       %       ASTM D 570         Mold Shrinkage, flow, 24 hrs       0.2       %       ASTM D 955         Mold Shrinkage, xflow, 24 hrs       0.7       %       ASTM D 955         Mold Shrinkage, flow, 24 hrs       0.25       %       ISO 294         Mold Shrinkage, xflow, 24 hrs       0.69       %       ISO 294	CTE, -40°C to 40°C, xflow	3.6E-05	1/°C	ASTM E 831
PHYSICAL         Value         Unit         Standard           Density         1.61         g/cm³         ASTM D 792           Moisture Absorption, 50% RH, 24 hrs         0.3         %         ASTM D 570           Mold Shrinkage, flow, 24 hrs         0.2         %         ASTM D 955           Mold Shrinkage, xflow, 24 hrs         0.7         %         ASTM D 955           Mold Shrinkage, flow, 24 hrs         0.25         %         ISO 294           Mold Shrinkage, xflow, 24 hrs         0.69         %         ISO 294	CTE, -40°C to 40°C, flow	3.01E-05	1/°C	ISO 11359-2
Density         1.61         g/cm³         ASTM D 792           Moisture Absorption, 50% RH, 24 hrs         0.3         %         ASTM D 570           Mold Shrinkage, flow, 24 hrs         0.2         %         ASTM D 955           Mold Shrinkage, xflow, 24 hrs         0.7         %         ASTM D 955           Mold Shrinkage, flow, 24 hrs         0.25         %         ISO 294           Mold Shrinkage, xflow, 24 hrs         0.69         %         ISO 294	CTE, -40°C to 40°C, xflow	3.64E-05	1/°C	ISO 11359-2
Moisture Absorption, 50% RH, 24 hrs       0.3       %       ASTM D 570         Mold Shrinkage, flow, 24 hrs       0.2       %       ASTM D 955         Mold Shrinkage, xflow, 24 hrs       0.7       %       ASTM D 955         Mold Shrinkage, flow, 24 hrs       0.25       %       ISO 294         Mold Shrinkage, xflow, 24 hrs       0.69       %       ISO 294	PHYSICAL	Value	Unit	Standard
Mold Shrinkage, flow, 24 hrs       0.2       %       ASTM D 955         Mold Shrinkage, xflow, 24 hrs       0.7       %       ASTM D 955         Mold Shrinkage, flow, 24 hrs       0.25       %       ISO 294         Mold Shrinkage, xflow, 24 hrs       0.69       %       ISO 294	Density	1.61	g/cm³	ASTM D 792
Mold Shrinkage, xflow, 24 hrs         0.7         %         ASTM D 955           Mold Shrinkage, flow, 24 hrs         0.25         %         ISO 294           Mold Shrinkage, xflow, 24 hrs         0.69         %         ISO 294	Moisture Absorption, 50% RH, 24 hrs	0.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs         0.25         %         ISO 294           Mold Shrinkage, xflow, 24 hrs         0.69         %         ISO 294	Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs 0.69 % ISO 294	Mold Shrinkage, xflow, 24 hrs	0.7	%	ASTM D 955
	Mold Shrinkage, flow, 24 hrs	0.25	%	ISO 294
Density 1.6 g/cm³ ISO 1183	Mold Shrinkage, xflow, 24 hrs	0.69	%	ISO 294
	Density	1.6	g/cm³	ISO 1183

Source GMD, last updated:02/14/2006

## 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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