

Product Texts

LNP THERMOTUF D1000FRD compound is based on Polycarbonate (PC) resin. Added features of this grade include: impact modified, good Low temperature ductility in combination with medium flow characteristics, excellent surface aesthetics, excellent knit line strength and excellent processability with opportunities for shorter IM cycle times compared to standard IM PC resins. This is a general purpose product available for wide range of opaque colors and may be an excellent candidate for a broad range of applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	13	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	14	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	2200	MPa	ASTM D 638
Tensile Strength at Yield	58	MPa	ASTM D 638
Tensile Strength at Break	57	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	90	%	ASTM D 638
Flexural Modulus	2100	MPa	ASTM D 790
Izod Impact notched, 1/8 in	750	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	600	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, 120°C/h 50N	138	°C	ISO 306
ASTM Data			
DTUL @ 264 psi	117	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Water absorption	0.12	%	Sim. to ISO 62
Humidity absorption	0.09	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183
Density	1180	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	295 - 315	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	270 - 295	°C	-
Zone 2	280 - 305	°C	-
Zone 3	295 - 315	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

High impact or impact modified