

Product Texts

LNP THERMOCOMP PF006U compound is based on Nylon 6 resin containing 30% glass fiber. Added features of this grade include: UV Stabilized.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.35	mm/mm	ASTM D 955
Mold Shrinkage, TD	1.1	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9040	MPa	ISO 527
Stress at break	144	MPa	ISO 527
Strain at break	3.3	%	ISO 527
Flexural modulus	8000	MPa	ISO 178
Flexural strength	203	MPa	ISO 178
Charpy impact strength, +23°C	90	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	75	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	55	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	11	kJ/m ²	ISO 180/1A
Rockwell hardness	L112	-	ISO 2039-2
ASTM Data			
Tensile Modulus	8750	MPa	ASTM D 638
Tensile Strength at Break	129	MPa	ASTM D 638
Elongation at Break	2.8	%	ASTM D 638
Flexural Modulus	8960	MPa	ASTM D 790
Flexural Strength	201	MPa	ASTM D 790
Izod Impact notched, 1/8 in	117	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	827	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	203	°C	ISO 75-1/-2
Vicat softening temperature, B	215	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	215	°C	ISO 306
Coeff. of linear therm. expansion, parallel	25	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	85	E-6/K	ISO 11359-1/-2
Thermal Conductivity	0.33	W/(m K)	DIN 52616
ASTM Data			
DTUL @ 66 psi	219	°C	ASTM D 648
DTUL @ 264 psi	206	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.4	-	IEC 62631-2-1
Dissipation factor, 1MHz	160	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Comparative tracking index	500	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	6.5	%	Sim. to ISO 62
Humidity absorption	1.53	%	Sim. to ISO 62
Density	1360	kg/m ³	ISO 1183

LNP™ THERMOCOMP™ Compound PF006U

PA6-GF30

Saudi Basic Industries Corporation (SABIC)

Water Absorption, 24hr	0.86	%	ASTM D 570
Density	1360	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.2	%	-
Melt temperature	260 - 290	°C	-
Mold temperature	80 - 100	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	250 - 280	°C	-
Zone 2	260 - 290	°C	-
Zone 3	260 - 290	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific