

Product Texts

LNP THERMOCOMP WF006XXP compound is based on Polybutylene Terephthalate (PBT) resin containing 30% glass fiber.

UL Yellow Card Link [E207780-103938351](https://www.ul.com/yellow-card-link/E207780-103938351)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	13	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
Melt flow index, MFI	17	g/10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9300	MPa	ISO 527
Yield stress	125	MPa	ISO 527
Yield strain	2	%	ISO 527
Stress at break	125	MPa	ISO 527
Strain at break	2	%	ISO 527
Flexural modulus	8500	MPa	ISO 178
Charpy impact strength, +23°C	45	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	45	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	8	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	7	kJ/m ²	ISO 180/1A
Rockwell hardness	R 118	-	ISO 2039-2
Ball indentation hardness	122	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	9300	MPa	ASTM D 638
Tensile Strength at Yield	119	MPa	ASTM D 638
Tensile Strength at Break	119	MPa	ASTM D 638
Elongation at Yield	2.7	%	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Flexural Modulus	7580	MPa	ASTM D 790
Rockwell Hardness	R 118	-	ASTM D 785
Taber Abrasion Resistance	19	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/8 in	85	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	80	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	801	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	204	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	217	°C	ISO 75-1/-2
Vicat softening temperature, A	223	°C	ISO 306
Vicat softening temperature, B	215	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	215	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Thermal Conductivity	0.19	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	750	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	800	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-

LNP™ THERMOCOMP™ Compound WF006XXP

PBT-GF30

Saudi Basic Industries Corporation (SABIC)

Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 66 psi	220	°C	ASTM D 648
DTUL @ 264 psi	203	°C	ASTM D 648
Vicat Temperature	215	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.1	-	IEC 62631-2-1
Dissipation factor, 100Hz	10	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	100	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	19	kV/mm	IEC 60243-1
Comparative tracking index	300	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	24.8	kV/mm	ASTM D 149
Dissipation Factor, 1 MHz	0.02	-	ASTM D 150
Dielectric Constant, 1 MHz	3.7	-	ASTM D 150
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.08	%	Sim. to ISO 62
Density	1530	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	250 - 265	°C	-
Mold temperature	65 - 90	°C	-
Zone 1	240 - 255	°C	-
Zone 2	245 - 260	°C	-
Zone 3	250 - 265	°C	-
Screw speed	50 - 80	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific