LNP™ THERMOCOMP™ Compound UF00ASW

PPA-GF50 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP UF00ASW compound is based on Polyphthalamide (PPA) resin containing 50% glass fiber. Added features of this grade include: Heat Stabilized, Hot Water Moldable.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.35**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.75**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**19100**	MPa	ISO 527
Yield stress	**214**	MPa	ISO 527
Yield strain	**1.4**	%	ISO 527
Stress at break	**214**	MPa	ISO 527
Strain at break	**1.4**	%	ISO 527
Flexural modulus	**17200**	MPa	ISO 178
Flexural strength	**324**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**45**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**9**	kJ/m²	ISO 180/1A
ASTM Data			
Flexural Modulus	**17500**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**91**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**788**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**281**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**296**	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 66 psi	**297**	°C	ASTM D 648
DTUL @ 264 psi	**285**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.33**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.27**	%	ASTM D 570
Density	**1650**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**4**	h	-
Melt temperature	**320 - 350**	°C	-
Mold temperature	**50 - 105**	°C	-
Zone 1	**315 - 320**	°C	-
Zone 3	**325 - 330**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.5**	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Applications

Automotive