

Product Texts

LNP THERMOCOMP YF005 compound is based on Thermoplastic Polyester Elastomer (TPE) resin containing 25% glass fiber.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.6	mm/mm	ASTM D 955
Mold Shrinkage, TD	2	mm/mm	ASTM D 955

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2360	MPa	ISO 527
Yield stress	46	MPa	ISO 527
Yield strain	9.5	%	ISO 527
Stress at break	45	MPa	ISO 527
Strain at break	10.3	%	ISO 527
Flexural modulus	2120	MPa	ISO 178
Flexural strength	53	MPa	ISO 178
Izod impact strength, +23°C, 4mm	76	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	29	kJ/m ²	ISO 180/1A

ASTM Data

Tensile Modulus	2370	MPa	ASTM D 638
Tensile Strength at Yield	47	MPa	ASTM D 638
Tensile Strength at Break	46	MPa	ASTM D 638
Elongation at Yield	9.9	%	ASTM D 638
Elongation at Break	8.3	%	ASTM D 638
Flexural Modulus	1980	MPa	ASTM D 790
Izod Impact notched, 1/8 in	331	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	998	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	142	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	180	°C	ISO 75-1/-2

ASTM Data

Coefficient of Thermal Expansion, MD	36	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	177	E-6/K	ASTM D 696
DTUL @ 66 psi	186	°C	ASTM D 648
DTUL @ 264 psi	152	°C	ASTM D 648

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.41	%	Sim. to ISO 62
Water Absorption, 24hr	0.31	%	ASTM D 570
Density	1400	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	≤0.1	%	-
Melt temperature	215 - 240	°C	-
Mold temperature	25 - 55	°C	-
Zone 1	180 - 195	°C	-
Zone 2	205 - 215	°C	-
Zone 3	225 - 240	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

LNP™ THERMOCOMP™ Compound YF005 - Americas

TPE-GF25

Saudi Basic Industries Corporation (SABIC)

Processing

Injection Molding

Regional Availability

North America