LNP™ THERMOCOMP™ Compound WX15003

PBT-(GF+MF)45 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP WX15003 compound is based on Polybutylene Terephthalate (PBT) resin containing 45 % glass fiber/mineral. Added features of this grade include: UV stabilized.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**11**	cm³/10min	ISO 1133
Temperature	**265**	°C	-
Load	**1.2**	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**8000**	MPa	ISO 527
Stress at break	**100**	MPa	ISO 527
Strain at break	**2**	%	ISO 527
Flexural modulus	**7400**	MPa	ISO 178
Charpy impact strength, +23°C	**35**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**35**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**4**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**3**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	**33**	kJ/m²	ISO 180/1U
Izod impact strength, -30°C, 4mm	**31**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**5**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**4**	kJ/m²	ISO 180/1A
Ball indentation hardness	**145**	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	**220**	°C	ISO 306
Vicat softening temperature, B	**200**	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	**200**	°C	ISO 306
Thermal Conductivity	**0.33**	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	**750**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**3.2**	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3.5**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**130**	E-4	IEC 62631-2-1
Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2

Other properties	Value	Unit	Test Standard
Density	**1830**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**110 - 120**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**255 - 280**	°C	-
Mold temperature	**60 - 100**	°C	-
Feed temperature	**40 - 60**	°C	-
Zone 1	**230 - 250**	°C	-
Zone 2	**240 - 260**	°C	-
Zone 3	**250 - 270**	°C	-

Characteristics

Processing
Injection Molding

Regional Availability
North America, Europe, Asia Pacific