LNP™ THERMOCOMP™ Compound ZKC08

(PPE+PS)-MF40 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP THERMOCOMP ZKC08 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing 40% minerals and impact modifier. Added features of this grade include: High Dielectric Constant (Dk), Extremely Low Dissipation Factor (Df), Good Ductility and Good Thermal Performance.

UL Yellow Card Link E207780-102468956

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**7**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**5**	kg	-
ASTM Data			
Melt Flow Index, MFI	**9.5**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**5**	kg	-
Mold Shrinkage, MD	**0.8**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.8**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2080**	MPa	ISO 527
Stress at break	**42**	MPa	ISO 527
Strain at break	**9.3**	%	ISO 527
Flexural modulus	**2230**	MPa	ISO 178
Izod notched impact strength, +23°C, 4mm	**21**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2170**	MPa	ASTM D 638
Tensile Strength at Yield	**43**	MPa	ASTM D 638
Tensile Strength at Break	**36**	MPa	ASTM D 638
Elongation at Yield	**7.8**	%	ASTM D 638
Elongation at Break	**8.9**	%	ASTM D 638
Flexural Modulus	**2000**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**205**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**149**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**174**	°C	ISO 75-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**1.0**	mm	-
ASTM Data			
DTUL @ 66 psi	**173**	°C	ASTM D 648
DTUL @ 264 psi	**148**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	**1430**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**105**	°C	-
Pre-drying - Time	**3 - 5**	h	-
Melt temperature	**285 - 320**	°C	-
Mold temperature	**90 - 120**	°C	-
Zone 1	**275 - 300**	°C	-
Zone 2	**280 - 310**	°C	-
Zone 3	**285 - 320**	°C	-
Screw speed	**50 - 150**	rpm	-
Back pressure	**0.3 - 0.9**	MPa	-

Characteristics

Processing
Injection Molding

Applications
Automotive

Regional Availability
North America, Europe, Asia Pacific