LNP™ THERMOCOMP™ Compound ZKC0CXXD

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

Product Texts

LNP THERMOCOMP ZKC0CXXD compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing minerals and impact modifier. Added features of this grade include: High Dielectric Constant (Dk), Extremely Low Dissipation Factor (Df), and Good Thermal Performance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**5.8**	cm³/10min	ISO 1133
Temperature	**300**	°C	-
Load	**5**	kg	-
ASTM Data			
Melt Flow Index, MFI	**9.6**	g/10min	ASTM D 1238
Temperature	**300**	°C	-
Load	**5**	kg	-
Mold Shrinkage, MD	**0.007**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.007**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**5000**	MPa	ISO 527
Yield stress	**72**	MPa	ISO 527
Yield strain	**2.8**	%	ISO 527
Stress at break	**69**	MPa	ISO 527
Strain at break	**3.1**	%	ISO 527
Flexural modulus, 23°C	**4800**	MPa	ISO 178
Flexural strength	**116**	MPa	ISO 178
Charpy impact strength, +23°C	**36.5**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**5.5**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**3.1**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**35**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**6.4**	kJ/m²	ISO 180/1A
Izod notched impact strength	**4.1**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
ASTM Data			
Tensile Modulus	**5000**	MPa	ASTM D 638
Tensile Strength at Yield	**72**	MPa	ASTM D 638
Tensile Strength at Break	**71**	MPa	ASTM D 638
Elongation at Yield	**2.7**	%	ASTM D 638
Elongation at Break	**3.1**	%	ASTM D 638
Flexural Modulus	**4690**	MPa	ASTM D 790
Flexural Strength	**127**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**57**	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	**46**	J/m	ASTM D 256
Temperature	**-30**	°C	-
Izod Impact unnotched, 1/8 in	**478**	J/m	ASTM D 256

Other properties	Value	Unit	Test Standard
Density	**1900**	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	**290 - 320**	°C	-
Mold temperature	**90 - 120**	°C	-
Zone 1	**270 - 300**	°C	-
Zone 2	**280 - 310**	°C	-
Zone 3	**290 - 320**	°C	-
Nozzle temperature	**290 - 320**	°C	-
Screw speed	**50 - 150**	rpm	-

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Back pressure	**0.3 - 0.9**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
High impact or impact modified

Features
Thermal Stability

Applications
Automotive

Regional Availability
North America, Europe, Asia Pacific, South and Central America

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