LNP™ THERMOCOMP™ COMPOUND PDXE00715EES

DESCRIPTION

LNP Thermocomp PDXE00715EES is a compound based on PEI containing proprietary fillers. Added feature of this grade: Healthcare.

TYPICAL PROPERTY VALUES

Revision 20191210

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Flexural Modulus, 1.3 mm/min, 50 mm span	5090	MPa	ASTM D 790
Flexural Modulus, 2 mm/min	5084	MPa	ISO 178
Flexural Stress	202	MPa	ISO 178
Tensile Modulus, 5 mm/min	5022	MPa	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	129	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	129	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.7	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	6	%	ASTM D 638
Tensile Modulus, 1 mm/min	4986	MPa	ISO 527
Tensile Stress, yield, 5 mm/min	127	MPa	ISO 527
Tensile Stress, break, 5 mm/min	123	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.5	%	ISO 527
Tensile Strain, break, 5 mm/min	5.8	%	ISO 527
IMPACT			
Izod Impact, notched, 23°C	52.9	J/m	ASTM D 256
Izod Impact, unnotched, 23°C	687	J/m	ASTM D 4812
Izod Impact, unnotched 80*10*4 +23°C	37.2	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5.2	kJ/m²	ISO 180/1A
Multiaxial Impact	7.1	J	ASTM D 3763
Multiaxial Impact	2.2	J	ISO 6603
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	205	°C	ASTM D 648
HDT, 0.45 MPa, 3.2 mm, unannealed	211	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	205	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	213	°C	ISO 75/Bf
CTE, -30°C to 30°C, xflow	0.000046	1/°C	ASTM D 696
CTE, -30°C to 30°C, flow	0.000032	1/°C	ASTM D 696
PHYSICAL			
Density	1.35	g/cm³	ASTM D 792
Specific Gravity	1.36	-	ASTM D 792
Mold Shrinkage, flow, 24 hrs	2.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	2.4	%	ASTM D 955
Moisture Absorption, 50% RH, 24 hrs	0.17	%	ASTM D 570
Moisture Absorption (23°C / 50% RH)	0.29	%	ISO 62
INJECTION MOLDING			

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	121	°C	
Drying Time (Cumulative)	4 – 6	hrs	
Melt Temperature	360 – 365	°C	
Front - Zone 3 Temperature	365 – 376	°C	
Middle - Zone 2 Temperature	354 – 365	°C	
Rear - Zone 1 Temperature	343 – 354	°C	
Mold Temperature	121 – 148	°C	
Back Pressure	0.34 – 0.68	MPa	
Screw Speed	60 – 100	rpm	
Maximum Moisture Content	0.02	%	

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2019 Copyright by SABIC. All rights reserved