LNP™ THERMOCOMP™ COMPOUND EC008APQ

EC008APQ

DESCRIPTION

LNP* THERMOCOMP* EC008APQ is a compound based on Polyetherimide containing 40% Carbon Fiber. Added features of this material include: Electrically Conductive, High Flow. FAR25.853 Compliant.

TYPICAL PROPERTY VALUES

Revision 20191213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	268	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1	%	ASTM D 638
Tensile Modulus, 5 mm/min	39420	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	356	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	31300	MPa	ASTM D 790
Hardness, Rockwell M	112	-	ASTM D 785
Tensile Stress, break, 5 mm/min	247	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.9	%	ISO 527
Tensile Modulus, 1 mm/min	35480	MPa	ISO 527
Flexural Stress	364	MPa	ISO 178
Flexural Modulus, 2 mm/min	30560	MPa	ISO 178
Compressive Strength	218	MPa	SABIC method
Shear Modulus	4656	MPa	ASTM D732
Shear Strength	120	MPa	ASTM D732
IMPACT			
Izod Impact, unnotched, 23°C	560	J/m	ASTM D 4812
Izod Impact, notched, 23°C	64	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	7	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	33	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	193	°C	ASTM D 648
CTE, -40°C to 150°C, flow	3.E-06	1/°C	ASTM E 831
CTE, -40°C to 150°C, xflow	4.E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.44	-	ASTM D 792
Density	1.433	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.11	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.01 – 0.05	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.1 – 0.5	%	ASTM D 955
Melt Flow Rate, 380°C/6.7 kgf	40	g/10 min	ASTM D 1238
Poisson's Ratio	0.44	-	ASTM E 132
ELECTRICAL			
Volume Resistivity	4.1E+03	Ohm-cm	ASTM D 257

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	4.5E+02	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	380 – 400	°C	
Front - Zone 3 Temperature	380 – 400	°C	
Middle - Zone 2 Temperature	380 – 400	°C	
Rear - Zone 1 Temperature	380 – 400	°C	
Mold Temperature	165 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	50 – 100	rpm	
Injection Speed	40 – 70	mm/s	

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