LNP™ STAT-KON™ COMPOUND DD000XI

DESCRIPTION

LNP™ STAT-KON™ DD000XI is a compound based on Polycarbonate co-polymer resin containing carbon powder Added features of this grade include: electrically conductive, improved impact properties, hydrolytic stability and complying with latest ATEX regulations

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	55	MPa	ISO 527
Tensile Stress, break, 50 mm/min	45	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	5	%	ISO 527
Tensile Strain, break, 50 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Tensile Stress, yld, Type I, 50 mm/min	55	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	45	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	12	%	ASTM D 638
Tensile Modulus, 50 mm/min	2550	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2100	MPa	ASTM D 790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	24	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	230	J/m	ASTM D 256
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	10	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m²	ISO 179/1eU
Multi-Axial Instrumented Impact Total Energy, 23°C	62	J	ISO 6603-2
Multi-Axial Instrumented Impact Energy @ peak, 23°C	60	J	ISO 6603-2
THERMAL			
Vicat Softening Temp, Rate B/50	145	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	129	°C	ISO 75/Af
Vicat Softening Temp, Rate B/50	145	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	139	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	127	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.30E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.20E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.30E-05	1/°C	ISO 11359-2

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	6.20E-05	1/°C	ISO 11359-2
PHYSICAL			
Density	1.21	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.06 – 0.12	%	ISO 62
Moisture Absorption, 50% RH, 24 hrs	0.08	%	ASTM D 570
Specific Gravity	1.21	-	ASTM D 792
Melt Volume Rate, MVR at 300°C/2.16 kg	5	cm³/10 min	ISO 1133
Mold Shrinkage, flow	0.6 – 1.0	%	SABIC method
Mold Shrinkage, xflow	0.6 – 1.0	%	SABIC method
ELECTRICAL			
Surface Resistivity	1.E+6 – 1.E+10	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	48	hrs	
Maximum Moisture Content	0.02	%	
Hopper Temperature	40 – 60	°C	
Melt Temperature	295 – 335	°C	
Rear - Zone 1 Temperature	275 – 315	°C	
Middle - Zone 2 Temperature	285 – 325	°C	
Front - Zone 3 Temperature	295 – 335	°C	
Nozzle Temperature	290 – 330	°C	
Mold Temperature	70 – 95	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	normal	rpm	
Shot to Cylinder Size	30 – 60	%	
Vent Depth	0.025 – 0.076	mm	

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