LNP™ STAT-KON™ COMPOUND KE004

KC-1004
REGION ASIA

DESCRIPTION

LNP* STAT-KON* KE004 is a compound based on Acetal Copolymer resin containing 20% Carbon Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20190607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	121	MPa	ASTM D 638
Tensile Stress, break	121	MPa	ASTM D 638
Tensile Strain, yield	1.6	%	ASTM D 638
Tensile Strain, break	1.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	14470	MPa	ASTM D 638
Flexural Stress	151	MPa	ASTM D 790
Flexural Modulus	11030	MPa	ASTM D 790
Tensile Stress, yield	110	MPa	ISO 527
Tensile Stress, break	110	MPa	ISO 527
Tensile Strain, yield	1.4	%	ISO 527
Tensile Strain, break	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	12990	MPa	ISO 527
Flexural Stress	160	MPa	ISO 178
Flexural Modulus	11500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	427	J/m	ASTM D 4812
Izod Impact, notched, 23°C	48	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	10	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	25	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	162	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	160	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	3.06E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	6.9E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.1E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	163	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	160	°C	ISO 75/Af
PHYSICAL			
Density	1.47	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.2	%	ASTM D 570

© 2019 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.6 – 0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.6 – 1.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.69	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.7	%	ISO 294
Density	1.47	g/cm³	ISO 1183
ELECTRICAL			
Surface Resistivity	1.E+02 – 1.E+06	Ohm	ASTM D 257
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101965203	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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