

LNPTTM STAT-KONTM COMPOUND WDF40

DESCRIPTION

LNP STAT-KON WDF40 compound is based on Polybutylene Terephthalate (PBT) resin containing 20% glass fibers and proprietary fillers. Added features for this grade include: Electrically Conductive, Radar Absorbing.

GENERAL INFORMATION	
Features	Electrically Conductive, Radar Absorption, No PFAS intentionally added
Fillers	Glass Fiber, Proprietary Filler
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Injection Molding

TYPICAL PROPERTY VALUES

Revision 20241025

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	80	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	1.5	%	ASTM D638
Tensile Modulus, 5 mm/min	7710	MPa	ASTM D638
Flexural Strength, 1.3 mm/min, 50 mm span	117	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	7110	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	77	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	7660	MPa	ISO 527
Flexural Strength, 2 mm/min	119	MPa	ISO 178
Flexural Modulus, 2 mm/min	7460	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	170	J/m	ASTM D4812
Izod Impact, notched, 23°C	48	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	3.4	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, -40°C to 40°C, flow	4.0E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.9E-05	1/°C	ASTM E831
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	199	°C	ISO 75/Af
HDT, 1.82 MPa, 3.2mm, unannealed	206	°C	ASTM D648
PHYSICAL ⁽¹⁾			
Specific Gravity	1.5	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24hrs)	0.016	%	ISO 62-4
Mold Shrinkage, flow	0.5 – 0.8	%	SABIC method
Mold Shrinkage, xflow	1.2 – 1.5	%	SABIC method
ELECTRICAL ⁽¹⁾			
Dielectric Constant (Dk), 77 GHz ⁽²⁾	13.31	-	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dissipation Factor (Df), 77 GHz ⁽²⁾	0.71	-	
Surface Resistivity	1E+01 – 1E+04	Ω	ASTM D257
Volume Resistivity	1E+00 – 1E+03	Ω.cm	ASTM D257
INJECTION MOLDING ⁽³⁾			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) The measurement is based on the Free Space Method.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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.