NORYL™ RESIN NF1520

DESCRIPTION

NORYL NF1520 is a compound based on PPE+PS resin containing 20% Glass Fiber and 15% PTFE. Added feature of this grade is Wear Resistance.

TYPICAL PROPERTY VALUES

Revision 20241025

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	74	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	74	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	4.2	%	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	101	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	5300	MPa	ASTM D790
K-factor xE-10, PV=2000 psi-fpm vs Steel	73	-	SABIC method
Coefficient of Friction on steel, Static	0.3	-	ASTM D1894
Coefficient of Friction on steel,Kinetic	0.46	-	ASTM D1894
IMPACT			
Izod Impact, unnotched, 23°C [1]	357	J/m	ASTM D4812
Izod Impact, notched, 23°C	74	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	16	J	ASTM D3763
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	102	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	96	°C	ASTM D648
HDT, 0.45 MPa, 6.4 mm, unannealed	105	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	99	°C	ASTM D648
PHYSICAL [1]			
Specific Gravity	1.34	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm [2]	0.15 – 0.25	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm [2]	0.25 – 0.45	%	SABIC method
FLAME CHARACTERISTICS [3]			
UL Yellow Card Link 2	E207780-228536	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	105 – 110	°C	
Drying Time	3 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	275 – 305	°C	
Nozzle Temperature	275 – 305	°C	
Front - Zone 3 Temperature	265 – 305	°C	
Middle - Zone 2 Temperature	255 – 300	°C	
Rear - Zone 1 Temperature	245 – 295	°C	
Mold Temperature	70 – 100	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 70	%	
Vent Depth	0.038 – 0.051	mm	

(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) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(3) 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.
(4) 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