

LNPTTM VERTONTM COMPOUND RVOOCESS

RF-700-12 EM HS

DESCRIPTION

LNP VERTON RVOOCESS is a compound based on Polyamide 66 (Nylon 66) resin containing 60% long glass fiber. Added features include Easy Molding, Heat Stabilized and Structural.

GENERAL INFORMATION

Features	Good Processability, Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding
Regional Availability	Global

INDUSTRY

Automotive
Building and Construction
Consumer
Industrial

SUB INDUSTRY

Automotive Exteriors
Building Component
Home Appliances, Commercial Appliance
Electrical, Industrial General

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	270	MPa	ASTM D638
Tensile Strain, break	1.6	%	ASTM D638
Tensile Modulus, 50 mm/min	19650	MPa	ASTM D638
Flexural Stress	430	MPa	ASTM D790
Flexural modulus	18020	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	281	MPa	ISO 527
Tensile Stress, break, 5 mm/min	279	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.7	%	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	22450	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	418	MPa	ISO 178
Flexural Strain, break, 2 mm/min	3	%	ISO 178
Flexural Modulus, 2 mm/min	19000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	411	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	18	J	ASTM D3763
Multiaxial Impact	18	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	100	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	53	kJ/m ²	ISO 180/1A

© 2023 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 -40°C	43	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	247	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.76E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	5.36E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	1.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	65	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	65	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	65	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.71	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.44	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.4	%	ISO 294
Density	1.71	g/cm ³	ISO 1183
Water Absorption, (23°C/24hrs)	0.9	%	ISO 62-1
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E45329-101344687	-	-
UL Recognized, 94HB Flame Class Rating	≥0.8	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	290 – 305	°C	
Front - Zone 3 Temperature	290 – 300	°C	
Middle - Zone 2 Temperature	290 – 300	°C	
Rear - Zone 1 Temperature	280 – 295	°C	
Mold Temperature	95 – 110	°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) 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.

(3) 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. 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.

(4) 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.

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

© 2023 Copyright by SABIC. All rights reserved

CHEMISTRY THAT MATTERS™



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.