

FRIANYL[®] A3 GF07 V2XI NC 1101/X FRIANYL®

Designed for Electrical applications requiring self-extinguishing properties combined with ignition resistance, this grade meets the most stringent safety requirements for insulating materials for the household appliance industry.

Product information

Resin Identification Part Marking Code Continuous Service Temperature	PA66-GF07 FR(16+72) >PA66-GF07 FR(16+72)< 120 °C		ISO 1043 ISO 11469 IEC 60216-1
Rheological properties			
Moulding shrinkage range, parallel Moulding shrinkage range, normal		~ % ~ %	ISO 294-4, 2577 ISO 294-4, 2577
Typical mechanical properties	dry/cond.		
Tensile modulus Tensile strain at yield, 50mm/min Tensile stress at break, 5mm/min Flexural modulus Flexural strength Izod notched impact strength, 23°C Izod impact strength, 23°C Poisson's ratio [C]: Calculated	4100/- 3.5/- 85/- 3700/- 120/- 4.5/- 30/- 0.36/- ^[C]	MPa % MPa MPa kJ/m ² kJ/m ²	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 180/1A ISO 180/1U
Thermal properties	dry/cond.		
Temperature of deflection under load, 0.45 MPa	250/*	°C	ISO 75-1/-2
Flammability	dry/cond.		
Burning Behav. at thickness h Thickness tested UL recognition Glow Wire Flammability Index, 0.4mm Glow Wire Flammability Index, 0.75mm Glow Wire Flammability Index, 3.0mm Glow Wire Ignition Temperature, 0.75mm Glow Wire Ignition Temperature, 0.4mm Glow Wire Ignition Temperature, 3.0mm FMVSS Class	V-1/* 3.2/* yes/* 850/- 850/- 960/- 875/- 875/- 900/- SE	class mm °C °C °C °C °C °C °C	IEC 60695-11-10 IEC 60695-11-10 UL 94 IEC 60695-2-12 IEC 60695-2-12 IEC 60695-2-12 IEC 60695-2-13 IEC 60695-2-12 IEC 60695-2-13 IEC 60695-2-13 IEC 60695-2-13
Physical/Other properties	dry/cond.		
Humidity absorption, 2mm Water absorption, 2mm Density	1.2/* 6/* 1420/-	% % kg/m³	Sim. to ISO 62 Sim. to ISO 62 ISO 1183





FRIANYL[®] A3 GF07 V2XI NC 1101/X FRIANYL®

Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2-4 h
Processing Moisture Content	≤ 0.1 %
Melt Temperature Optimum	280 °C
Min. melt temperature	265 °C
Max. melt temperature	290 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	80 °C
Min. mould temperature	70 °C
Max. mould temperature	90 °C

Characteristics

Processing	Injection Moulding
Additives	Flame retardant
Special characteristics	Flame retardant, Heat stabilised or stable to heat

Printed: 2025-05-29

Page: 2 of 2

Revised: 2025-02-14 Source: Celanese Materials Database

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendatino or to use any equipment, processing techni

© 2025 Celanese or its affiliates. All rights reserved. Celanese®, registered C-ball design and all other trademarks identified herein with ®, TM, SM, unless otherwise noted, are trademarks of Celanese or its affiliates. Fortron is a registered trademark of Fortron Industries LLC.