



# FRIANYL® A3 H GF25 V0XI

### **FRIANYL®**

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

	Prod	uct i	infor	mation
--	------	-------	-------	--------

Resin Identification Part Marking Code	PA66-GF25-FR(17) >PA66-GF25-FR(17)<		ISO 1043 ISO 11469
Rheological properties			
Moulding shrinkage range, parallel Moulding shrinkage range, normal	0.2 - 0.5 % 0.5 - 0.7 %		ISO 294-4, 2577 ISO 294-4, 2577
Typical mechanical properties	dry/cond.		
Tensile modulus Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Flexural modulus Charpy impact strength, 23°C Izod notched impact strength, 23°C Poisson's ratio [C]: Calculated	10500/- 140/- 2/- 10000/- 50/- 8/- 0.34/- <sup>[C]</sup>	MPa MPa % MPa kJ/m² kJ/m²	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 179/1eU ISO 180/1A
Thermal properties	dry/cond.		
Melting temperature, 10°C/min Temperature of deflection under load, 1.8 MPa	260/* 245/*	°C	ISO 11357-1/-3 ISO 75-1/-2
Flammability	dry/cond.		
Burning Behav. at 1.5mm nom. thickn. UL recognition Burning Behav. at thickness h Thickness tested Glow Wire Flammability Index, 0.75mm Glow Wire Flammability Index, 3.0mm Glow Wire Ignition Temperature, 0.75mm Glow Wire Ignition Temperature, 1.0mm Glow Wire Ignition Temperature, 3.0mm FMVSS Class	V-0/* yes/* V-0/* 0.8/* 960/- 960/- 925/- 925/- SE	class class mm °C °C °C °C	IEC 60695-11-10
Physical/Other properties	dry/cond.		
Humidity absorption, 2mm Water absorption, 2mm Density	1/* 4/* 1610/-	% % kg/m³	Sim. to ISO 62 Sim. to ISO 62 ISO 1183

Printed: 2025-05-29 Page: 1 of 2

Revised: 2024-08-16 Source: Celanese Materials Database





## FRIANYL® A3 H GF25 V0XI

#### **FRIANYL®**

#### Injection

Drying Recommended	yes	
Drying Temperature	,	°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

Delivery form Granules

Additives Flame retardant

Special characteristics Flame retardant, Heat stabilised or stable to heat

Printed: 2025-05-29 Page: 2 of 2

Revised: 2024-08-16 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 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 should not be construed 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 to 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 recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users

© 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.