



Designed for any technical application requiring long term heat resistance packed with prime quality mechanical performances. Suitable for drinking water applications.

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Resin Identification Part Marking Code Continuous Service Temperature	PA66-GF30 >PA66-GF30< 130	°C	ISO 1043 ISO 11469 IEC 60216-1
Rheological properties			
Moulding shrinkage range, parallel Moulding shrinkage range, normal	0.3 - 0.6 0.6 - 0.9		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 Flexural strength Charpy impact strength, 23°C Charpy notched impact strength, 23°C Charpy notched impact strength, -30°C Izod notched impact strength, 23°C Izod notched impact strength, -30°C Poisson's ratio [C]: Calculated	10000/- 190/- 3/- 8500/- 260/- 70/- 13/- 10/- 11/- 8.0/- 0.34/- <sup>[C]</sup>	MPa MPa % MPa MPa kJ/m² kJ/m² kJ/m² kJ/m²	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 179/1eU ISO 179/1eA ISO 179/1eA ISO 180/1A
Thermal properties	dry/cond.		
Melting temperature, 10°C/min Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 0.45 MPa	265/* 250/* 260/*	°C °C	ISO 11357-1/-3 ISO 75-1/-2 ISO 75-1/-2
Flammability	dry/cond.		
Burning Behav. at thickness h Thickness tested UL recognition FMVSS Class	HB/* 0.8/* yes/* B	class mm	IEC 60695-11-10 IEC 60695-11-10 UL 94 ISO 3795 (FMVSS 302)
Electrical properties	dry/cond.		
Volume resistivity Surface resistivity Electric strength Comparative tracking index	1E13/- */1E13 21/- 500/-	Ohm.m Ohm kV/mm	IEC 62631-3-1 IEC 62631-3-2 IEC 60243-1 IEC 60112

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### Physical/Other properties

dry/cond.

Humidity absorption, 2mm	1.7/*	%	Sim. to ISO 62
Water absorption, 2mm	5.9/*	%	Sim. to ISO 62
Density	1370/-	kg/m³	ISO 1183

## Injection

Drying Recommended	yes	
Drying Temperature	80	°C
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.15	%
Melt Temperature Optimum	295	°C
Min. melt temperature	285	°C
Max. melt temperature	305	°C
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	70	°C
Max. mould temperature	120	°C

### Characteristics

Processing Injection Moulding

Delivery form Granules

Special characteristics Heat stabilised or stable to heat

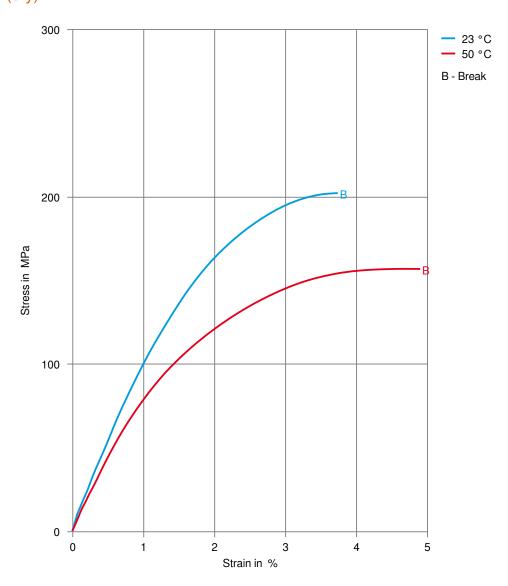
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### Stress-strain (dry)

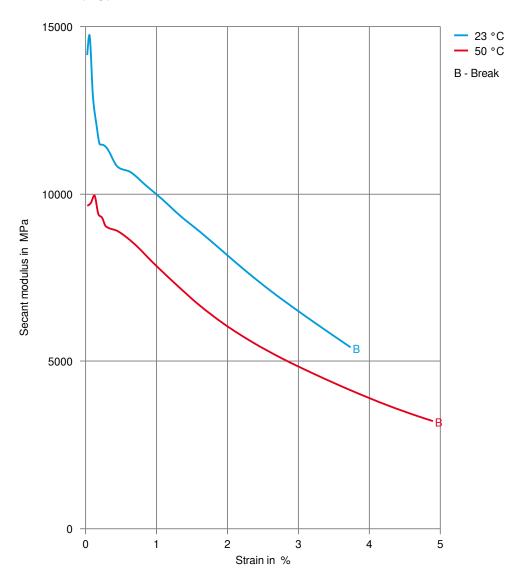


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### Secant modulus-strain (dry)



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## CELANYL® A3 WR GF30 NC 1102/Z/FA

### Chemical Media Resistance

#### Salt solutions

✓ Sodium Hypochlorite solution (10% by mass), 23°C

#### Symbols used:

possibly resistant

Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).

x not recommended - see explanation

Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

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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 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 e

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