

**Ultramid® D3EG10 FC Aqua bk 23285**

PA\*-GF50

BASF

Ultramid® D3EG10 FC Aqua bk 23285 is applicable for plastic parts, where the approvals of material for drinking water contact and direct food contact is a mandatory requirement.

The product is approved according to

- 21 CFR FDA § 177.1500 "Nylon resins". and the coloration complies with 21 CFR FDA § 178.3297 "Colorants for polymers. (for repeated use applications only) The finished article may not be used in contact with alcohol.
- European Food Contact European Food Contact Commission Regulation (EU) 10/2011
- GMP (EC) n°2023/2006

and has the approvals for drinking water regulations of

- KTW
- DVGW W270
- WRAS
- ACS (disclosure of ingredients)
- NSF (disclosure of ingredients)

For questions regarding the compliance with further regulations, and certificates, please contact your local BASF representative or Plastics Safety (E-Mail: [plastics.safety@basf.com](mailto:plastics.safety@basf.com), Fax 49 621-60-93253).

Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	16000 / 16000	MPa	ISO 527
Stress at Break	245 / 210	MPa	ISO 527
Strain at Break	2.5 / 2.5	%	ISO 527
Tensile Creep Modulus, 1h	* / 14200	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	* / 10300	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	95 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy), -30°C	90 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	12 / 11	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	12 / -	kJ/m <sup>2</sup>	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Melting Temperature (10°C/min)	250 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	225 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	14.7 / *	E-6/K	ISO 11359-1/-2

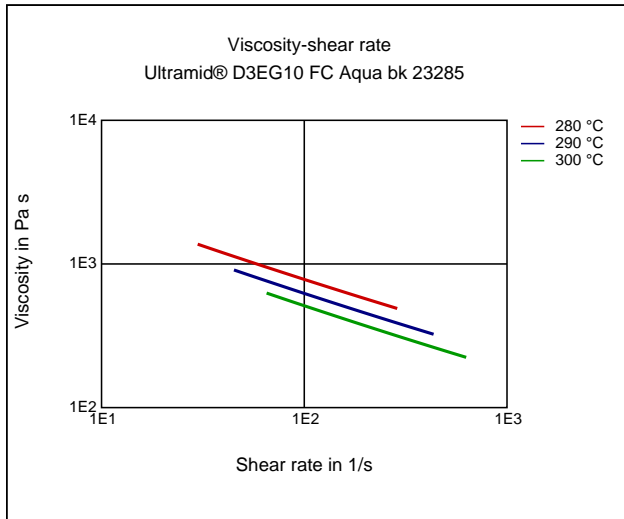
Other Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	3.1 / *	%	Sim. to ISO 62
Humidity absorption	1.2 / *	%	Sim. to ISO 62
Density	1580 / -	kg/m <sup>3</sup>	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Viscosity number	120 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628

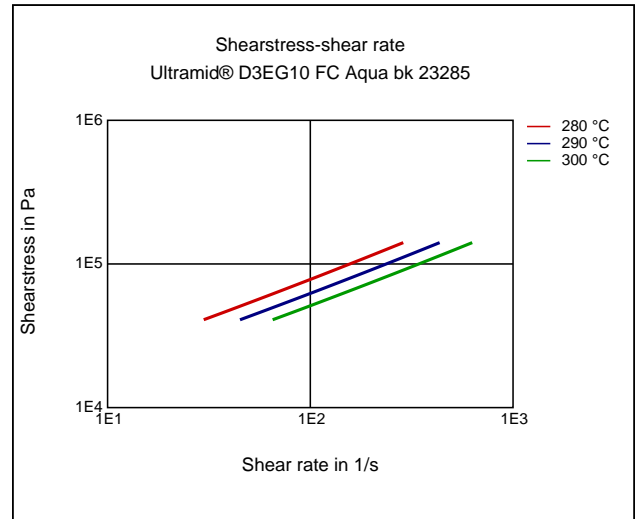
Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
Injection Molding, melt temperature	310	°C	ISO 294
Injection Molding, mold temperature	100	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

Diagrams

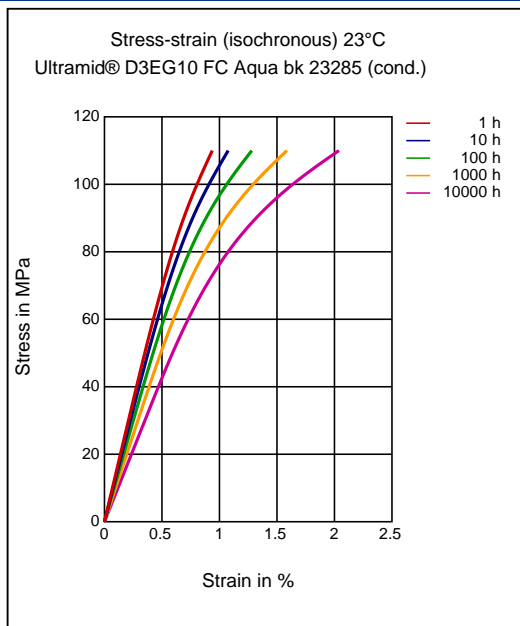
Viscosity-shear rate



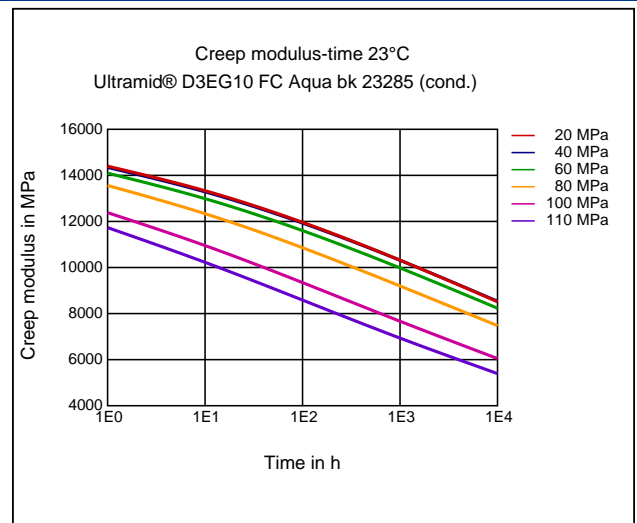
Shearstress-shear rate



Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



Characteristics

Processing

Injection Molding

Delivery form

Black

Certifications

Food approval, Food approval 10/2011, Food Contact (FDA),  
Water contact, Water contact KTW, Water contact DVGW W270,  
NSF Approval

Injection Molding

PREPROCESSING

Pre/Post-processing, max. allowed water content: .15 %

Pre/Post-processing, Pre-drying, Temperature: 110 °C

Pre/Post-processing, Pre-drying, Time: 8 h

## PROCESSING

injection molding, Melt temperature, range: 280 - 310 °C  
injection molding, Melt temperature, recommended: 300 °C  
injection molding, Mold temperature, range: 80 - 120 °C  
injection molding, Mold temperature, recommended: 100 °C

## Disclaimer

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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