

#### **TECHNICAL DATA SHEET**

# Engineering plastic type DG/DL

#### **General notes:**

- POM/GF30 acetal resin reinforced with 30 wt% glass fibre
- good tensile and flexural strength, fatigue and creep resistance
- low friction, good wear and abrasion resistance
- low moisture absorption
- good chemical resistance (oils, grease, fuels, organic solvents); not resistant to strong acids, alkalis and oxidizing agents; good hydrolytic resistance (hot water)
- insulating
- typical applications include handling of very scratch sensitive components (ceramic and glass devices, wafers, capillary)

#### Mechanical properties

Flexural modulus +23°C	8000 MPa	ASTM D 790
Flexural modulus +60°C	5700 MPa	ASTM D 790
Flexural modulus +90°C	4500 MPa	ASTM D 790
Flexural modulus +120°C	3800 MPa	ASTM D 790
Tensile strength +23°C	83 MPa	ISO 527
Tensile strength +60°C	60 MPa	ISO 527
Tensile strength +90°C	53 MPa	ISO 527
Tensile strength +120°C	45MPa	ISO 527
Rockwell hardness M	85	ASTM D 785
Izod-Impact strength (notched) +23°C	55 J/m	ASTM D 256
Charpy-Impact strength (unnotched) +23°C	20 kJ/m <sup>2</sup>	DIN 53453

### Thermal properties

Temp. of defl. under load (1.80 MPa)	162 °C	ASTM D648
Temp. of defl. under load (0.45 MPa)	165 °C	ASTM D648
Vicat softening temperature (50°C/h 50N)	156 °C	ISO 306
Coef. of lin. therm expansion, normal	4.50 E-5/°C	ASTM D 696
Continuous Use Temperature	85°C	20'000 h
Short Time Temperature	120°C	

## Electrical properties

Comparative tracking index	>600 Volts	IEC 112
Electric strength (2mm)	23.0 kV/mm	IEC 243-1

This document contains information based on average values as obtained from the results of laboratory tests and observations made on the material. Ideal-Tek SA declines all responsibility from an improper use of the product described in this document.





# Other properties

Density	1.59 g/ccm	ISO 1183
Color	DG white	
	DL black	
Water absorption in water 23°C (24h)	0.20%	ISO 62

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