

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	<i>ASTM D 790</i>
Flexural modulus +60°C	5700 MPa	<i>ASTM D 790</i>
Flexural modulus +90°C	4500 MPa	<i>ASTM D 790</i>
Flexural modulus +120°C	3800 MPa	<i>ASTM D 790</i>
Tensile strength +23°C	83 MPa	<i>ISO 527</i>
Tensile strength +60°C	60 MPa	<i>ISO 527</i>
Tensile strength +90°C	53 MPa	<i>ISO 527</i>
Tensile strength +120°C	45MPa	<i>ISO 527</i>
Rockwell hardness M	85	<i>ASTM D 785</i>
Izod-Impact strength (notched) +23°C	55 J/m	<i>ASTM D 256</i>
Charpy-Impact strength (unnotched) +23°C	20 kJ/m²	<i>DIN 53453</i>

Thermal properties

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

Electrical properties

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

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	<i>ISO 1183</i>
Color	DG white DL black	
Water absorption in water 23°C (24h)	0.20%	<i>ISO 62</i>

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