

# AD majoris DG 300

## Polypropylene

### AD majoris



# Prospector

#### Product Description

DG 300 is a 30% chemically coupled glass fibre reinforced polypropylene compound (with Yellow card) intended for injection moulding.

The product is available in natural, but other colours can be provided on request.

DG 300 has been developed especially for demanding applications in various engineering sectors.

DG 300 has high rigidity and impact strength, good dimensional stability and good creep resistancy also at high temperatures.

#### APPLICATIONS

Product requiring very high overall mechanical performance such as:

- Sockets and junction boxes for electrical industry
- Electrical tool and appliance components
- Lamp housing
- Miscellaneous technically items

Can suitably be made from DG 300.

#### General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber Reinforcement, 30% Filler by Weight
Features	• Chemically Coupled • Good Dimensional Stability • High Rigidity • Good Creep Resistance • High Impact Resistance
Uses	• Electrical/Electronic Applications • Housings • Engineered Applications • Power/Other Tools
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density	1.12 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	6.0 g/10 min	ISO 1133
Molding Shrinkage (2.00 mm)	0.60 to 0.80 %	ISO 294-4

Mechanical	Nominal Value Unit	Test Method
Tensile Stress		ISO 527-2/50
Yield, 23°C, Injection Molded	85.0 MPa	
Tensile Strain		ISO 527-2/50
Yield, 23°C, Injection Molded	2.2 %	
Flexural Modulus <sup>2</sup> (23°C, Injection Molded)	5600 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-20°C, Injection Molded	9.0 kJ/m <sup>2</sup>	
23°C, Injection Molded	12 kJ/m <sup>2</sup>	

Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness (H 358/30)	120 MPa	ISO 2039-1

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	159 °C	ISO 75-2/B
1.8 MPa, Unannealed	145 °C	ISO 75-2/A
Vicat Softening Temperature	164 °C	ISO 306/A50

Flammability	Nominal Value Unit	Test Method
Flame Rating - UL	HB	UL 94
Glow Wire Flammability Index (2.00 mm)	750 °C	IEC 60695-2-12

Injection	Nominal Value Unit
Processing (Melt) Temp	230 to 270 °C

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Injection	Nominal Value	Unit
Mold Temperature	30.0 to 50.0	°C
Injection Rate	Moderate	

**Injection Notes**

Hold-on Pressure: 50 to 70% of the injection pressure.

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 mm/min

**Revision History**

Document Created: Tuesday, May 08, 2012  
Added to Prospector: October, 2004  
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