

POLYPROPYLENE



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DG300

POLYPROPYLENE COMPOUND 30 % GLASS FIBRE REINFORCED

DESCRIPTION

DG300 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.

DG300 has been developed especially for demanding applications in various engineering sectors.

DG300 has high rigidity and impact strength, good dimensional stability and good creep resistancy also at high temperatures. This product fulfil norm RoHS.

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 **DG300**.

PHYSICAL PROPERTIES¹⁾

	Typical Value*	Unit	Test Method
Melt Flow Rate (230°C/2.16 Kg)	6	g/10 min	ISO 1133
Density	1120	Kg/m ³	ISO 1183
Tensile modulus (1mm/min.)	6000	MPa	ISO 527-2
Tensile Stress at yield (50 mm/min)	85	MPa	ISO 527-2
Tensile Strain at yield (50 mm/min)	2,2	%	ISO 527-2
Flexural modulus (2 mm/min.)	5600	MPa	ISO 178
Flexural stress (50 mm/min)	145	MPa	ISO 178
Heat Deflection Temp.			
(0.46 MPa)	150	°C	ISO 75
(1.82 MPa)	145	°C	ISO 75
Continuous use temperature	120	°C	
Coefficient of linear thermal expansion	0.30	10 ⁻⁴ m ⁻¹ K ⁻¹	ISO 11359-1-2
Charpy impact (notched, +23°C)	12	KJ/m ²	ISO 179/1e A
(notched, -20°C)	9	KJ/m ²	ISO 179/1eA
(unnotched, +23°C)	53	KJ/m ²	ISO 179/1eU
Hardness, ball indentation (H385/30)	120	MPa	ISO 2039
Vicat softening temp. (A 10 N)	164	°C	ISO 306
Glow wire test (2 mm)	750	°C	IEC 695-2.1
Flammability	HB	-	UL 94
Shrinkage (2 mm)	0,6 – 0,8	%	AD majoris

¹⁾ Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity.

* Data must not be used for specification work.

PROCESSING

DG300 is easy to process with standard injection moulding machines. Following moulding parameters should be used as guidelines.

Drying temperature : 80°C - 3h
Melt temperature: 230°C - 270°C
Injection speed: medium
Hold-on pressure: 50 - 70 % of the injection pressure
Mould temperature: 30 - 50°C

STORAGE AND HANDLING

DG300 should be stored in dry conditions at temperatures below 50°C and protected from UV-light.

Improper storage can initiate degradation with resulting odour generation and colour changes.

SAFETY

DG300 is not classified as a dangerous preparation.

Dust and fines from the product may give a risk for dust explosion. All equipment should be properly earthed.

Inhalation of dust may irritate the respiratory system and should be avoided.

During processing of the product small amounts of fumes are generated, which require proper ventilation.

RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

A Safety Data Sheet is available on request. Please contact your AD majoris representative for more details on various aspects of safety, recovery and disposal of the product.

The recommendations and data given are based on our experience to date, but no liability can be assumed in connection with their usage.