

# CELANYL® B3 HH GF35 BK 9005/E

## CELANYL®

Car industry, Household appliances, Electrical devices.

### Product information

Resin Identification	PA6-GF35	ISO 1043
Part Marking Code	>PA6-GF35<	ISO 11469
Continuous Service Temperature	130 °C	IEC 60216-1

### Rheological properties

	dry/cond.		
Melt volume-flow rate	24/*	cm <sup>3</sup> /10min	ISO 1133
Temperature	270/*	°C	
Load	5/*	kg	
Viscosity number	140/*	cm <sup>3</sup> /g	ISO 307, 1628
Moulding shrinkage range, parallel	0.2 - 0.5	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.6 - 0.9	%	ISO 294-4, 2577

### Typical mechanical properties

	dry/cond.		
Tensile modulus	10800/-	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	175/-	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3/-	%	ISO 527-1/-2
Flexural modulus	9000/-	MPa	ISO 178
Flexural strength	230/-	MPa	ISO 178
Charpy impact strength, 23°C	90/-	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	13.5/-	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23°C	12/-	kJ/m <sup>2</sup>	ISO 180/1A
Izod impact strength, 23°C	75/-	kJ/m <sup>2</sup>	ISO 180/1U
Ball indentation hardness, H 961/30	215/-	MPa	ISO 2039-1
Poisson's ratio	0.34/- <sup>[C]</sup>		

[C]: Calculated

### Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	225/*	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	210/*	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	220/*	°C	ISO 75-1/-2

### Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB/*	class	IEC 60695-11-10
Thickness tested	1.6/*	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB/*	class	IEC 60695-11-10
Thickness tested	0.4/*	mm	IEC 60695-11-10
Glow Wire Flammability Index, 0.75mm	650/-	°C	IEC 60695-2-12
Glow Wire Flammability Index, 3.0mm	650/-	°C	IEC 60695-2-12

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### Electrical properties

	dry/cond.		
Volume resistivity	1E15/-	Ohm.m	IEC 62631-3-1
Surface resistivity	*/1E14	Ohm	IEC 62631-3-2
Electric strength	21/-	kV/mm	IEC 60243-1
Comparative tracking index	500/-		IEC 60112

### Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1/*	%	Sim. to ISO 62
Water absorption, 2mm	6/*	%	Sim. to ISO 62
Density	1410/-	kg/m <sup>3</sup>	ISO 1183

### Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.15 %
Melt Temperature Optimum	260 °C
Min. melt temperature	240 °C
Max. melt temperature	290 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	80 °C
Min. mould temperature	60 °C
Max. mould temperature	120 °C

### Characteristics

Processing	Injection Moulding
Delivery form	Granules
Special characteristics	Heat stabilised or stable to heat