Celanese
The chemistry inside innovation™

CELANYL® A3 D10 BK 9005/G

CELANYL®

Heat resistand grade, suitable for automotive applications and other technical uses requiring medium impact resistance and good flexibility.

Product information

Resin Identification	(PA66+PA6)-I		ISO 1043
Part Marking Code	>(PA66+PA6)-I<		ISO 11469
Continuous Service Temperature	130	°C	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	135 / *	cm^3/g	ISO 307, 1628
Moulding shrinkage range, parallel	1.3 - 1.9	%	ISO 294-4, 2577
Moulding shrinkage range, normal	1.3 - 1.9	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	2500 / -	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	65 / -	MPa	ISO 527-1/-2
Tensile strain at break, 50mm/min	35 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	N / -	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	N / -	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	8 / -	kJ/m^2	ISO 179/1eA
Poisson's ratio	0.38 / -[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	85 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	185 / *	°C	ISO 75-1/-2

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.8 / *	%	Sim. to ISO 62
Water absorption, 2mm	7.5 / *	%	Sim. to ISO 62
Density	1100 / -	kg/m^3	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	290	°C
Min. melt temperature	280	°C
Max. melt temperature	300	°C
Screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	80	°C

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Min. mould temperature	50 °C
Max. mould temperature	100 °C

Characteristics

Processing	Injection Moulding
Delivery form	Granules
Additives	Nucleated
Special characteristics	High impact or impact modified, Heat stabilised or stable to heat, High Flow

Revised: 2024-08-16 Source: Celanese Materials Database