Celanese
The chemistry inside innovation™

ECOMID® ARX H GF30 BK 9005/L

ECOMID®

Car industry, Household appliances, Electrical devices.

Product information

Resin Identification	PA66-GF30		ISO 1043
Part Marking Code	>PA66-GF30<		ISO 11469
Continuous Service Temperature	125	°C	IEC 60216-1

Rheological properties

	dry/cond.		
Viscosity number	135 / *	cm^3/g	ISO 307, 1628
Moulding shrinkage range, parallel	0.3 - 0.7	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.9 - 1.3	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	9200 / -	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	140 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.2 / -	%	ISO 527-1/-2
Charpy impact strength, 23°C	40 / -	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	35 / -	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	6 / -	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	4 / -	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 961/30	190 / -	MPa	ISO 2039-1
Poisson's ratio	0.34 / -[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	235 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	245 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	3.2 / *	mm	IEC 60695-11-10

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.5 / *	%	Sim. to ISO 62
Water absorption, 2mm	5.2 / *	%	Sim. to ISO 62
Density	1360 / -	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	285	°C
Min. melt temperature	275	°C
Max. melt temperature	295	°C

Revised: 2024-11-26 Source: Celanese Materials Database

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Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	70	°C
Max. mould temperature	120	°C

Characteristics

Processing	Injection Moulding
Special characteristics	Heat stabilised or stable to heat

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