



# ECOMID® ARX H GF30 BK 9005/H

**ECOMID®** 

General purpose grade, suitable for many technical applications. Medium term heat ageing resistant.

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Resin Identification Part Marking Code Continuous Service Temperature	PA66-GF30 >PA66-GF30< 125	°C	ISO 1043 ISO 11469 IEC 60216-1
Rheological properties	dry/cond.		
Viscosity number	145/*	cm <sup>3</sup> /g	ISO 307, 1628
Moulding shrinkage range, parallel	0.3 - 0.7	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.7 - 1.1	%	ISO 294-4, 2577
Typical mechanical properties	dry/cond.		
Tensile modulus	8800/6300 <sup>[C]</sup>	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	130/88 <sup>[C]</sup>	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.6/4 <sup>[C]</sup>	%	ISO 527-1/-2
Flexural modulus	7950/-	MPa	ISO 178
Flexural strength	200/-	MPa	ISO 178
Charpy impact strength, 23°C	45/60 <sup>[C]</sup>	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	40/-	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.5/9 <sup>[C]</sup>	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30 °C	5.5/-	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	6.6/-	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C	5.4/-	kJ/m²	ISO 180/1A
Ball indentation hardness, H 961/30	185/-	MPa	ISO 2039-1
Poisson's ratio	$0.34/0.35^{[C]}$		
[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	229/*	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	250/*	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	238/*	°C	ISO 306
Coefficient of linear thermal expansion	22.9 <sup>[1]</sup> /*	E-6/K	ISO 11359-1/-2
(CLTE), parallel	[1]		
Coefficient of linear thermal expansion (CLTE), normal	117 <sup>[1]</sup> /*	E-6/K	ISO 11359-1/-2
[1]: Temperature range: -30°C to 150°C			
Flammability	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB/*	class	IEC 60695-11-10
FMVSS Class	В		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	31.2	mm/min	ISO 3795 (FMVSS 302)

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## **ECOMID®**

### Physical/Other properties

dry/cond.

Humidity absorption, 2mm $1.5/^*$ %Sim. to ISO 62Water absorption, 2mm $5.4/^*$ %Sim. to ISO 62Density1360/-kg/m³ISO 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
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	70	°C
Max. mould temperature	120	°C
Ejection temperature	220	°C

#### Characteristics

Processing Injection Moulding

Delivery form Granules

Special characteristics Heat stabilised or stable to heat

### **Automotive**

OEM STANDARD ADDITIONAL INFORMATION

VW Group VW 50133 \*Best Fitting Grade To PA66-6-A, Not Officially Approved

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