

# ECOMID® ARX H GF35 BK 9005/V

## ECOMID®

Designed for Automotive industry, suitable for other technical applications that require mechanical performance and long term heat ageing resistance.

### Product information

Resin Identification	(PA66+PA6)-GF35	ISO 1043
Part Marking Code	>(PA66+PA6)-GF35<	ISO 11469
Continuous Service Temperature	125 °C	IEC 60216-1

### Rheological properties

	dry/cond.		
Viscosity number	145 / *	cm <sup>3</sup> /g	ISO 307, 1628
Moulding shrinkage range, parallel	0.3 - 0.6	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.6 - 0.9	%	ISO 294-4, 2577

### Typical mechanical properties

	dry/cond.		
Tensile modulus	10000 / 6500	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	145 / 85	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.5 / 4.8	%	ISO 527-1/-2
Charpy impact strength, 23 °C	46 / 56	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30 °C	40 / 39	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23 °C	7.5 / 10 <sup>[C]</sup>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30 °C	6 / -	kJ/m <sup>2</sup>	ISO 179/1eA
Ball indentation hardness, H 961/30	195 / -	MPa	ISO 2039-1
Poisson's ratio	0.34 / 0.35 <sup>[C]</sup>		

[C]: Calculated

### Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	260 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 0.45 MPa	245 / *	°C	ISO 75-1/-2

### Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB / *	class	IEC 60695-11-10
FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	38.9	mm/min	ISO 3795 (FMVSS 302)

### Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.5 / *	%	Sim. to ISO 62
Water absorption, 2mm	5.5 / *	%	Sim. to ISO 62
Density	1390 / -	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	285 °C
Min. melt temperature	275 °C

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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

### Characteristics

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

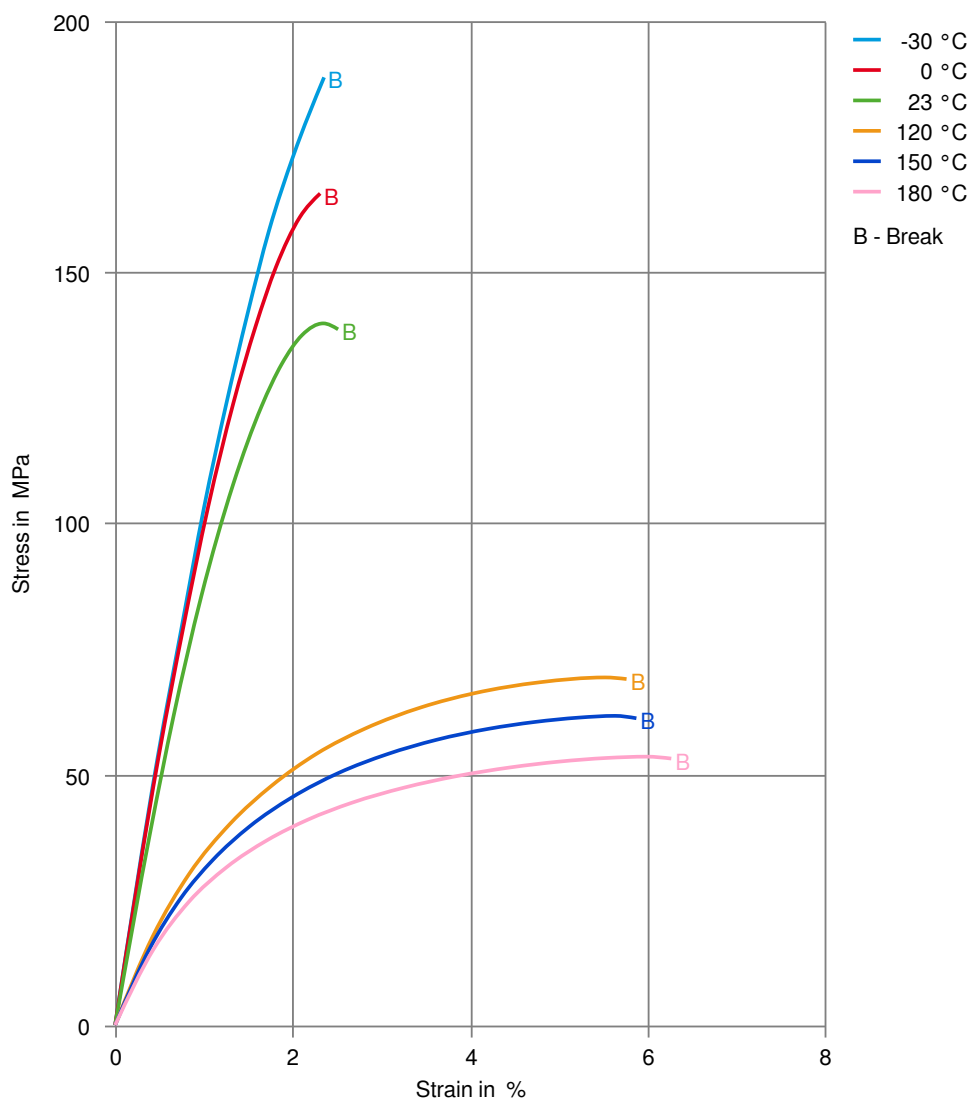
### Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Ford	WRS-M4D673-B2	
VW Group	VW 50127	*Best Fitting Grade To PA66-7-A, Not Officially Approved
VW Group	VW 50133	*Best Fitting Grade To PA66-7-A, Not Officially Approved

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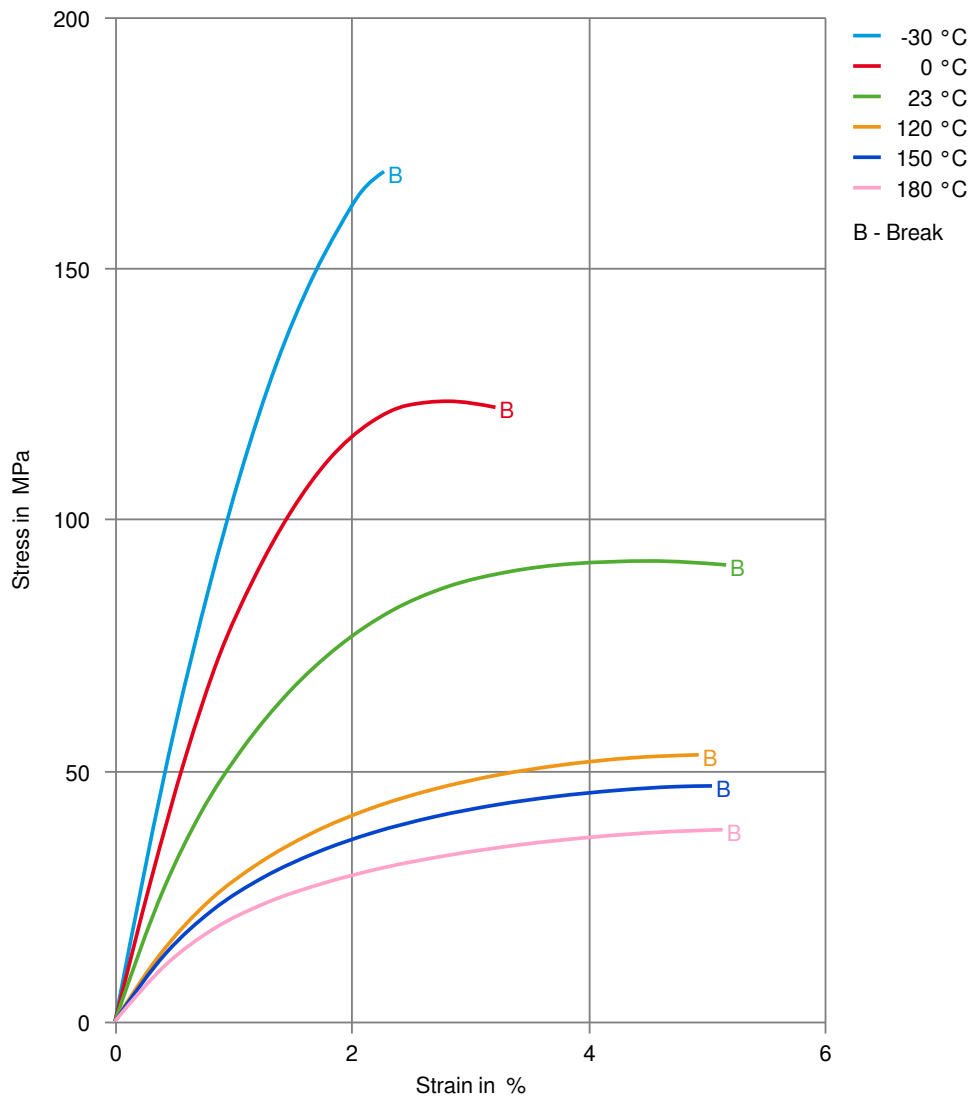
## Stress-strain (dry)



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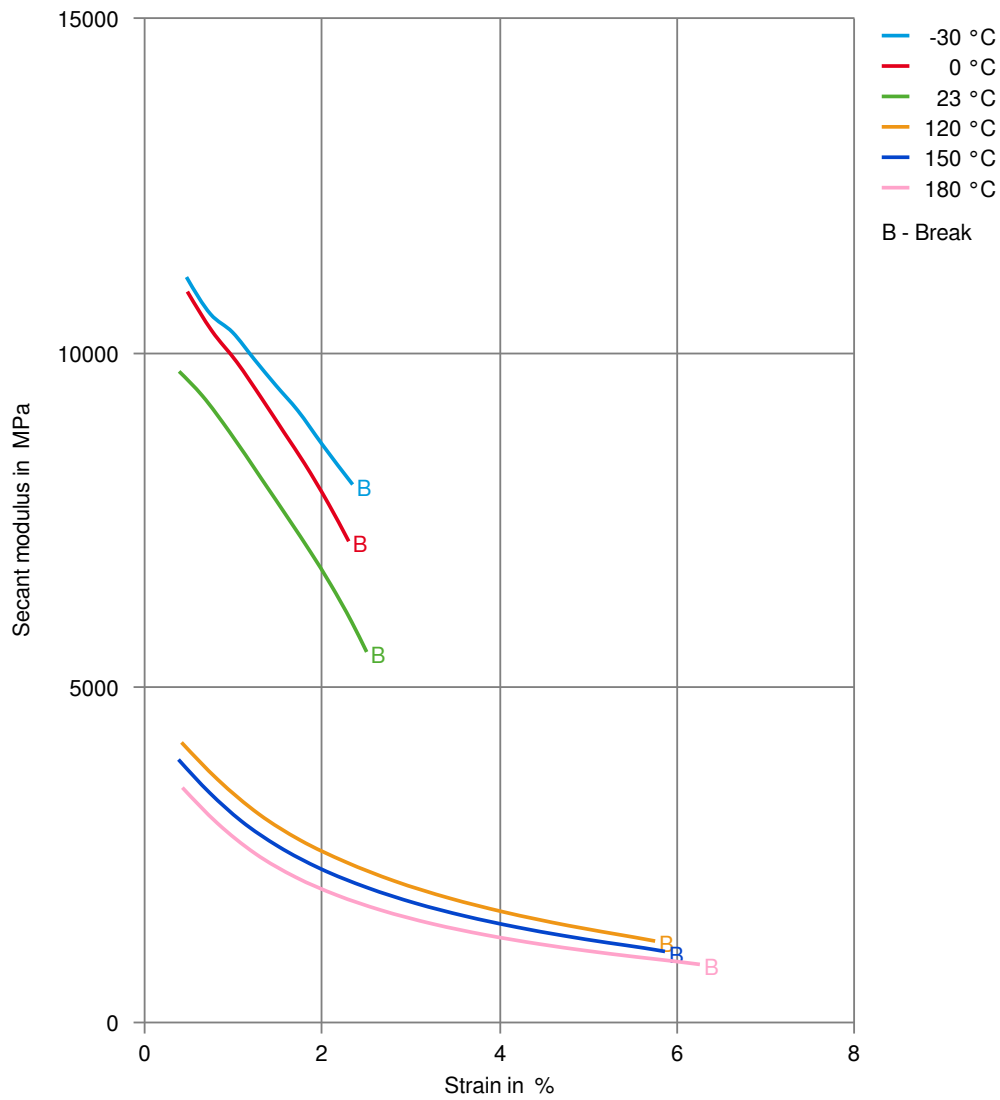
## Stress-strain (cond.)



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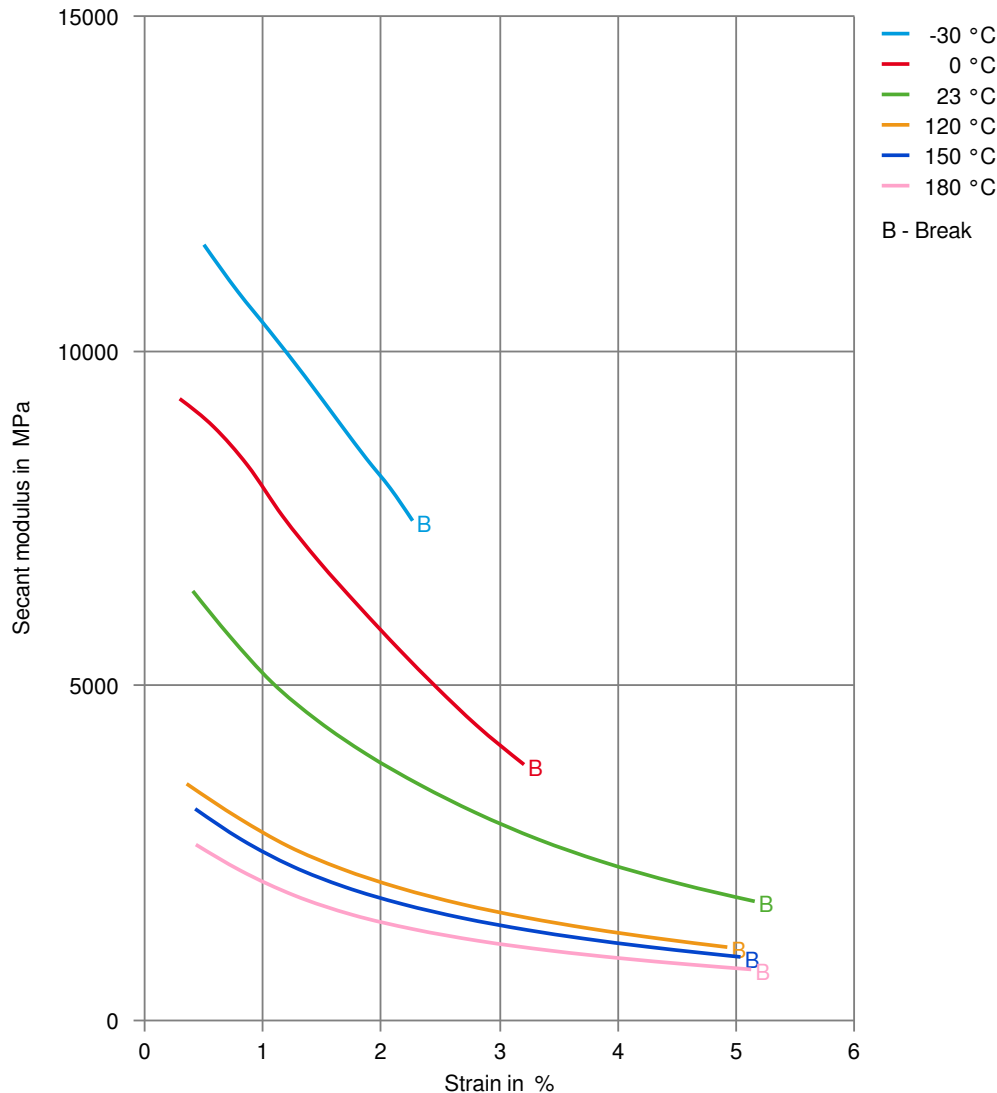
## Secant modulus-strain (dry)



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### Secant modulus-strain (cond.)



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