

Product information

Andropol 500AT

General

Andropol 500 AT is a thixotropic, cobalt pre-accelerated vinyl ester resin based on epoxy-bisphenol A with low viscosity. Andropol 500 AT is characterised by high chemical and thermal resistance. The resin is suitable for winding processes as well as for the production of tanks and pipes.

Chemical and physical properties :

	Value	Unit	Method
Acid value	8.5 max.	mg KOH/g	ASTM D 1639
Appearance	dull grey-blue	liquid	
Colour (Gardner)	45 +2	%	
Styrene content			
Stability at 65 °C	6	Days	
Viscosity at 20°C Gel time at 20°C	450-700	mPas.	Brookfield , 100 rpm
100 g resin 2 g MEKP 50%	35-45	min	ASTM D 2471
Time to T. max. max. temp.	45-60 145-165	min °C	

Post-curing

To achieve the best possible properties, laminates made of Andropol 500 AT should be annealed. 24 hours after curing at 20 °C, anneal at 80 °C for at least 3 hours. For laminates with a thickness of more than 6 mm, the annealing time has to be increased by 1 hour can be extended.

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spec. properties of the pure resin :

	Value	Unit	Method
Barcol hardness	45		ASTM D 1706
Flexural strength	125	MPa	DIN 53452
E-modulus	4000	MPa	DIN 53452
Tensile strength	80	MPa	DIN 53455/ EN 61
Train-E-Module	3400	MPa	DIN 53455/ EN 61
Elongation at break	4-5	%	DIN 53455/ EN 61
HDT	105	°C	ISO 75A

spec. properties of the processed resin (glass content approx. 40%):

	23°C	65°C	93°C	107°C	121°C
Flexural strength (MPa)	208	198	189	101	34
Flexural modulus of elasticity (GPa)	7,6	6,9	5,9	3,4	3,3
Tensile strength (MPa)	152	172	145	124	76
Tensile - E- modulus (GPa)	9,9	10,2	8,5	6,3	4,3

Packaging

The product is supplied in tin packaging of 1; 5; 10; 30 kg, in 225 kg drums and 1000 kg containers.

Storage and shelf life

The product must be stored in a cool, dark place, free from iron and copper salts as well as organic and inorganic peroxides, and dry, sealed in its original packaging.

When stored in this way, the resin will keep for at least 6 months.

Security

the product is highly flammable and harmful to health. For further information, please refer to the safety data sheet.