

Product Data Sheet

Atlac 580 AC 300

Chemical/Physical nature

Atlac 580 AC 300 is a pre-accelerated vinyl ester urethane resin and gives a low peak exotherm development during cure. Cured products of Atlac 580 AC 300 demonstrate excellent hydrolysis resistance and good thermal stability.

Major applications

Atlac 580 AC 300 is developed for resin injection moulding applications. The resin specially recommended for the production of fibre reinforced boats.

Product specifications upon delivery

Specification	Range	Unit	TM
Viscosity at	130 - 170	mPa.s	2013
Solid content, IR	45 - 48	%	2033
Water content	600	ppm	2350
Appearance	sl. hazy	-	2265
Gel time from 25 to 35°C	65 - 75	min	2625
Cure time from 25°C to peak	80 - 95	min	2625
Peak temperature	130 - 150	°C	2625

Remarks

TM 2013: 100 s⁻¹, 23°C, Z2

TM 2625: 100 g of resin + 3.0 g Butanox M 50

Properties of the liquid resin (typical values)

Property	Value	Unit	TM
Flash point	± 33	°C	2800
Shelf life, no init., dark, 25°C	6	Month	-

Properties of cast unfilled resin (typical values)

Property	Value	Unit	TM
Specific weight	1.08		
Hardness	40	Barcol	DIN EN 59
Tensile strength	78	MPa	ISO 527-2
Tensile E-modulus	3.0	GPa	ISO 527-2
Elongation at break	3.4	%	ISO 527-2
Flexural strength	150	MPa	ISO 178
Flexural E-Modulus	3.5	GPa	ISO 178
Heat Deflection Temp. (HDT)	107	°C	ISO 75-Ae
Impact res. - unnotched sp.	15	kJ/m ²	ISP 179

Curing conditions

All test samples were postcured for 24 hrs at 20°C and 3 hours at 100°C.

Guidelines before use

Before use, the resin should be conditioned at a well-defined, application dependant temperature (usually 15°C minimum for a MEKP cure). Stir the product before blending.

Storage guidelines

Atlac 580 AC 300 should be stored in tightly closed containers in a cool, and dry place. The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only. Shelf life is reduced at temperatures above 25°C and the properties might change during storage.

Material Safety

A Material Safety Data Sheet of this product is available on request.

Test methods

Test methods referred to in the table(s) are available on request.