

Product Data Sheet

Atlac Premium 200

Nature

Atlac Premium 200 is a medium viscous, high reactive vinyl ester resin dissolved in methacrylates. The resin is styrene-free.

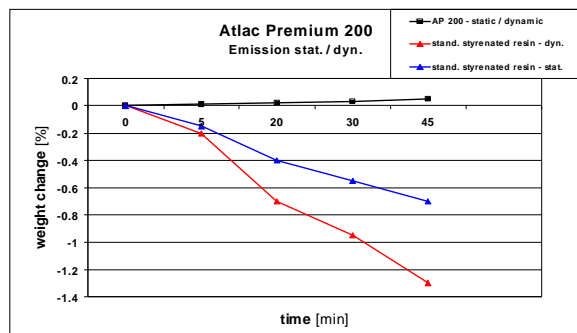
Because containing photo initiators it can be cured both, with low energy UV-Light (365-420 nm) or with appropriate conventional curing agents.

Major Applications

Atlac Premium 200 has been especially developed for filament winding application.

Special Properties

The chemical composition of Atlac Premium 200 makes it ideal for applications where high emissions of reactive solvents are not acceptable, e.g. on mono-styrene containing resins.



Product specifications

Property	Range	Unit	TM
Viscosity	500 - 800	mPa.s	2013
Acid Value	8 - 12	mgKOH/g	2401
Reactivity - peak time	1 - 5	min	2500_1
Reactivity - peak temp.	100 - 150	°C	2500_2

Remarks:

TM 2013: Physica, Z2 /100 s⁻¹ / 23°C

TM 2500: Ultra-Vitalux Test Lamp (300 W, Osram)

Properties of the liquid resin (typical values)

Property	Value	Unit	TM
Density	ca. 1100	Kg/m ³	2160
Flash point	113	°C	2800
Stability, no init., dark, 25°C	6	Month	-

Properties of cast unfilled resin (typical values)

Property	Value	Unit	TM
Tensile Strength	70	MPa	ISO 527-2
Tensile E-Modulus	3.4	GPa	ISO 527-2
Elongation at Break	2.6	%	ISO 527-2
Heat Deflection Temperature	103	°C	ISO 75-A

Curing conditions

cured under UV-light (Uvaspot T-400, Philips)

distance 500 mm, exposure time 7 min

Processing

Atlac Premium 200 does normally not exhibit tack-free cure. To ensure tack-free surfaces exposed to air an appropriate foil has to be applied.

Atlac Premium 200 can be cured with low energy UV-Light (wave length 365-420 nm) or conventionally with usual curing agents.

Curing in places not directly exposed to day- or UV-light can be assisted by adding e.g. 0,5 ml t-butylperoxy-2-ethyl-hexanoate (e.g. Trigonox 21, AKZO-Nobel or TBPEH, Degussa initiators) per 100 g of resin.

The final state of the cure may be optimized by post curing at elevated temperatures (e.g. 80°C) for several hours, if small amounts of peroxides have been added to the resin.

Storage Guidelines

The resin should be stored indoors in the original, unopened and undamaged packaging, in a dry place at temperatures between 5°C and 30°C.

Shelf life might be reduced at higher temperatures.

The shelf life of photo initiator containing unsaturated poly- or vinyl esters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

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Product 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.

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