

## Data Sheet

## AQUA Roofing Resin



### Description

Aqua Roofing Resin unsaturated polyester is a pre-accelerated, thixotropic, LSE resin primarily intended for use in hand-lay and spray-lay fabrications. It is particularly suited for the manufacture of medium and large mouldings. Aqua Roofing Resin has good resistance to drainage and exhibits a medium rate of curing. It is important that the resin is stirred well before use.

Aqua Roofing Resin exhibits predictable curing characteristics but, like all formulated resin systems, will be affected slightly by variations in ambient conditions, catalyst concentrations, type and concentration of additives such as fillers and pigments etc and normal batch to batch variations during manufacture. We recommend that the resin is used above 15°C. In cold weather drums should be stored indoors (if possible at least 24 hrs before use). Gel time and curing will be slower at resin temperatures below 15°C and will lengthen as resin temperature decreases.

### Features

- Low viscosity
- Long pot life and rapid cure
- Low styrene emission
- Low exotherm

### Technical Data

Physical data in liquid state

Property	Unit	Value	Test Method
Viscosity Brookfield LV at 25°C, spindle 2 at 12 rpm	mPa.s (cP)	900 - 1100	2460 - 001
Viscosity Cone & Plan	mPa.s (cP)	180 - 200	2470 - 001
Specific gravity	g/cm3	1,08 - 1,12	2100 - 001
Volatiles content	% weight	42 - 46	2530 - 001
Acid Value	mgKOH/g	30	2000 - 001
Flash point	°C	32	ASTM D 3278-95
Gel time at 25°C + 2% BUTANOX M50	Minutes	13 - 17	2160-021
Storage stability from the date of manufacture	Months	6	G180

Non-reinforced casting properties

Fully post-cured property	Unit	Value	Test Method
Tensile strength	MPa	47	BS 2782: Part 3: Method 320C: 1976
Tensile elongation	%	2.2	BS 2782: Part 3: Method 320C: 1976
Flexural strength	Mpa	90	BS 2782: Part 3: Method 335A: 1978
Flexural modulus	Mpa	3700	BS 2782: Part 3: Method 335A: 1986
Volume shrinkage	%	9	BS 2782: Part 6: Method 644A: 1986
Heat distortion temperature (HDT)	°C	63	BS 2782: Part 1: Method 121A: 1991
Water absorption - 24 hours	mg	10	BS 2782: Part 4: Method 430A: 1983