

Product data

Synolite 0328-A-1

Applications

Synolite 0328-A-1 is recommended for the production of water clear castings and encapsulations.

Principal properties

Synolite 0328-A-1 is a pre-accelerated low reactivity orthophthalic acid based resin with a very gradual cure. The product has a low peak exotherm combined with a low polymerisation shrinkage and high brilliance after polymerisation. This resin is UV-light stabilised.

Product specifications

Property	Range	Unit	TM
Viscosity, Brookfield, 23°C	360 - 620	mPa.s	2014
Colour, APHA	max. 30	-	2017
Solids content, IR	63 - 65	%	2033
Refractive index, 23°C	1.545-1.547	-	2150
Appearance	clear	-	2265
Water content	1000	ppm	2350
Acid value, as such	12 - 18	mg KOH/g	2401
Gel time from 25 to 35°C	19-23	minutes	2625
Colour	blue	-	4073

Other data

Property	Value	Unit	TM
Density, 23°C	appr. 1100	kg/m ³	2160
Flash point	appr. 33	°C	2800

Typical physical properties of cast unfilled resin

Property	Value	Unit	TM
Density, 20 °C	appr. 1100	kg/m ³	2160
Volume shrinkage	6,1	%	-
Tensile strength	56	MPa	ISO 527-2
Elongation at break	1,6	%	ISO 527-2
Flexural strength	83	MPa	ISO 178
Modulus of elasticity in tension	4,1	GPa	ISO 178
Heat deflection temperature (HDT)	55	°C	ISO 75-A
Barcol hardness	40-45	Barcol	GYZJ 934-1
Martens temperature	49	°C	DIN 53548

Typical curing characteristics

Property	Value	Unit	TM
Gel time 25°C - 35°C	19 - 23	minutes	2625

Remarks

Conditions: 25°C, 100g resin - 1.0g Butanox M 50

Guidelines before use

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

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 is reduced at higher temperatures. 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.

Material Safety

A material safety data sheet for the product is available on request.

Test methods

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



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