

SYNOLITE™ 0328-A-1

CHEMICAL/PHYSICAL NATURE

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 polymerization shrinkage and high brilliance after polymerization. This resin is UV-light stabilized.

MAJOR APPLICATIONS

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

PRODUCT SPECIFICATIONS UPON DELIVERY

Property	Range	Unit	TM
Viscosity, 23°C	360 - 620	mPa.s	2013
Color, APHA	max. 70	-	2017
Solids content, IR	61.5 - 64.5	%	2033
Refractive index, 23°C	1.545 - 1.547	-	2150
Appearance	clear	-	2265
Color	blue	-	
Water content	0.1	%	2350
Acid value, as such	12 - 18	mg KOH/g	2401
Gel time from 25 to 35°C	19 - 23	Minute	2625
Cure time from 25°C to peak	42 - 57	Minute	2625
Peak temperature	40 - 50	°C	2625

REMARKS

TM 2013: Z2/100s⁻¹/23°C

TM 2625: 1.0 g Butanox M50 (Akzo) in 100 g resins

PROPERTIES OF THE LIQUID RESIN (TYPICAL VALUES)

Property	Value	Unit	TM
Density, 20°C	appr. 1100	kg/m ³	2160
Flash point	appr. 33	°C	2800
Stability, no init., dark, 25°C	6	Month	-

PROPERTIES OF CAST UNFILLED RESIN (TYPICAL VALUES)

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

GUIDELINES BEFORE USE

Before use, the resin should be conditioned at a well-defined, application dependent temperature (usually 15°C minimum for a MEKP 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 and the properties might change during storage. Shelf life is reduced at higher temperatures and the properties of the resin might change during storage. 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 of this product is available on request.

TEST METHODS

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

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PRODUCT INQUIRY? PLEASE CLICK HERE

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