

NAD-1120T

Product description:

NAD-1120T is a thixotropic unsaturated polyester resin derived from **Orthophthalic acid** and standard glycols dissolved in Styrene. NAD-1120T is of medium viscosity and medium reactivity.

Major applications:

NAD-1120T is a **general-purpose thixotropic resin** with good mineral filler wet-out and high filler loading acceptance, designed for use in applications involving high vertical surfaces.

Product specifications upon delivery

Property	Range	Unit	TM
Color	< 3	Gardner	ASTM D1544
Appearance	Hazy, slightly yellow	-	-
Acid value	20 - 30	mg KOH/g Resin	ISO 2114
Viscosity, 25 °C	750 - 850	mPa.s	ISO 2555
Density, 20 °C	1.10 – 1.14	g/cm ³	ASTM D1475
Solid Content	60 - 65	Wt.%	ISO 3251
Gel time, 25 °C	10 - 20	min.	ISO 2535
Peak time, 25 °C	20 - 40	min.	ISO 2535
B/A (Cure/Gel time)	< 1.8	-	ISO 2535
Peak Temp. 25 °C	170 ± 10	°C	ISO 2535

- Reactivity determined with 1.5 g MEKP A60 Catalyst and 0.1 g Cobalt (10%) to 100 g Resin
- Gel time and viscosity can be tailored to meet specific customer requirements

Typical properties of cast unfilled resin

Property	Value	Unit	TM
Tensile Strength	65 ± 5	MPa	ISO 527-2
Tensile Modulus	3 ± 0.5	GPa	ISO 527-2
Elongation at Break	> 3.0	%	ISO 527-2
Flexural Strength	110 ± 10	MPa	ISO 178
Flexural Modulus	3 ± 0.5	GPa	ISO 178
HDT	55 ± 5	°C	ISO 75-2
Barcol Hardness	40 - 45	-	ASTM D2583
Linear Shrinkage	< 1.5	%	ASTM D2566
Water absorption	0.1 - 0.3	%	ISO 62

- Curing the resin involves adding 1.5 g MEKP A60 Catalyst and 0.1 g Cobalt (10%) to 100 g Resin

Post Curing Note:

- For optimum chemical, water- and heat-resistant properties, molded parts should be post-cured before being put into service.
- Mature molded specimens for 24 hours at room temperature. Post-cure in an 80°C oven for 3 hours, then keep them in room temperature for one more 24-hours. Immediate post-curing after maturation is most effective.
- Post curing for the HDT test is carried out at 105 °C for 5 hours.

Storage Note:

Store Resin indoors, in original unopened packaging, in a dry place at 5-25°C (ideally <20°C, max 30°C), Higher temperatures reduce shelf life. Keep in dark, 100% sunlight-tight containers, keep away from any heat source and opening only before use. Product should not be frozen.

Shelf life:

Minimum 3 months after production.

Packaging:

NAD-1120T could be supplied in drum, polyethylene tank, IBC and Container.

