

NAD-1106 Sanitaryware Acrylic back up resin

Product description:

NAD-1106 is an **unsaturated polyester** resin derived from **Orthophthalic acid** and standard glycols dissolved in Styrene. NAD-1106 is of very low viscosity and low reactivity with **good adhesion to PMMA Sheets** and **controlled shrinkage** during the cure process.

Major applications:

NAD-1106 is especially recommended for use as an acrylic-back-up resin used for the manufacturing of bathtubs, vanities and shower trays. The resin is non-accelerated, non-thixotropic unsaturated polyester resin designed to be applied by spray or hand lay-up.

Product specifications upon delivery

Property	Range	Unit	TM
Color	< 2	Gardner	ASTM D1544
Appearance	Clear, slightly yellow	-	-
Acid value	< 40	mg KOH/g Resin	ISO 2114
Viscosity, 20 °C	70 - 100	mPa.s	ISO 2555
Density, 20 °C	1.0 – 1.12	g/cm ³	ASTM D1475
Solid Content	52 - 58	Wt. %	ISO 3251
Gel time, 30 °C	7 – 13	min.	ISO 2535
Peak time, 30 °C	15 – 40	min.	ISO 2535
B/A (Cure/Gel time)	2.0 – 4.0	-	ISO 2535
Peak Temp. 30 °C	165 ± 20	°C	ISO 2535

- Reactivity determined with 2.0 g MEKP A60 Catalyst and 0.2 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	50 ± 5	MPa	ISO 527-2
Tensile Modulus	2.5 ± 0.3	GPa	ISO 527-2
Elongation at Break	> 3.0	%	ISO 527-2
Flexural Strength	90 ± 10	MPa	ISO 178
Flexural Modulus	2.5 ± 0.3	GPa	ISO 178
HDT	50 ± 3	°C	ISO 75-2
Barcol Hardness	35 - 40	-	ASTM D2583
Linear Shrinkage	≤ 1	%	ASTM D2566
Water absorption	0.25 – 0.35	%	ISO 62

- Curing the resin involves adding 2.0 g MEKP A60 Catalyst and 0.2 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% sun light-tight containers, keep away from any heat source and opening only before use. Product should not be frozen.

Shelf life:

Minimum 4 months after production.

Packaging:

NAD-1106 could be supplied in drum, polyethylene tank, IBC and Container.

