



Polyester Resin IK – 9000

Product Name: Amine Accelerated unsaturated polyester resin for mastic stone.

Description: Amine accelerated, medium reactive. Unsaturated polyester resin with high flexibility and air drying properties.

Properties and applications: IK-9000 is pre accelerated with built-in amine in its structure. A very filler loading capacity medium reactivating and good flexibility properties makes it ideal for use in the manufacturing of mastic stone and filling compounds which will readily harden even at low temperatures. In the mastic formulations which IK-9000 is used as the sole binder, benzoyl peroxide type catalysts be chosen for curing formulations.

Typical properties of liquid resin.

Property ^{*1}	Value
Acid Value	36 ± 37 mgr KOH/gr
Appearance	Clear liquid / Light yellow
Solid content	66 ± 2 %
Viscosity ^{*2}	100 - 150 cps
Specific gravity	1.05 - 1.1 gr/cm ³
Gel time ^{*3}	10 – 13 min
Time to Peak	20 ± 5 min
Peak exotherm	100 ± 5 °C
Shelf life	6 Month

*1 : Measurement was obtained under 25°C

*2 : LVT# 3-60 rpm (@) 25°C

*3 : Benzoyl peroxide paste 50% , 2 phr @ 25°C



TYPICAL CLEAR CASTING PROPERTIES OF CURED

PROPERTY	ST ^{*4}	TEST METHOD
Tensile strength	30 ± 5 MPa	ASTM D638
Tensile modulus	1.5 - 1.7 Gpa	ASTM D638
Tensile elongation	4 - 6 %	ASTM D638
Flexural strength	60 ± 5 Mpa	ASTM D790
Flexural modulus	1.8 – 2.0 Gpa	ASTM D790
Volume shrinkage	4 - 5 %	ASTM D2566
HDT ^{*5}	40 °C	ASTM D648
Barcol Hardness	20 ± 2	ASTM D2583

*4 : ST values based on conversion

*5 : Cure condition for HDT 24 hours at room temperature then 2 hours at 105°C

Notice in Use:

1. The gel time of IK9000 is affected primarily by catalyst concentration and temperature. The variation of cure characteristics may be caused by the variations of catalyst. Humidity pigment fillers and other additives it is recommended that the fabricators check the cure characteristic with a small quantity resin before proceeding for bulk production.
2. IK9000 contains organic solvent (styrene), keep away from heat sparks and flames.
3. IK9000 is a potentially reactive chemical please store it in dark and keep away from heat and direct sunshine.
4. Containers not completely emptied must be closed immediately after use.

PACKAGE:

Standard packing is 200 kg steel drum.