



## Polyester Resin IK – 8001

**Product name:** Amine Accelerated Unsaturated polyester resin

**Description:** Amine accelerated highly reactive, unsaturated polyester resin with medium flexibility and air drying properties.

**Properties and application:** IK- 8001 is reaccelerated with built-in amine in its structure. high filler loading capacity high reactivity and flexibility properties makes it ideal for use in the manufacturing of stone repair putties and filling compounds which will readily harden even at low temperatures. In the putty formulations which IK-8001 is used as the sole binder, benzoyl peroxide type catalysts be chosen for curing formulations.

Typical properties of liquid resin.

Property <sup>*1</sup>	Value
Acid Value	35 ± 5 mgr KOH/gr
Appearance	Clear liquid / Light yellow
Solid content	64 ± 3 %
Viscosity <sup>*2</sup>	250 - 300 cps
Specific gravity	1.05 - 1.1 gr/cm <sup>3</sup>
Gel time <sup>*3</sup>	3 – 7 min
Time to Peak	10 ± 2 min
Peak exotherm	170 ± 5 °C
Shelf life	6 Month

\*1 : Measurement was obtained under 25<sup>0</sup>C

\*2 : LVT# 3-60 rpm (@) 25<sup>0</sup>C

\*3 : Benzoyl peroxide paste 50% , 2 phr @ 25<sup>0</sup>C



## TYPICAL CLEAR CASTING PROPERTIES OF CURED

PROPERTY	ST *4	TEST METHOD
Tensile strength	50 ± 5 MPa	ASTM D638
Tensile modulus	2.2 ~ 2.4 Gpa	ASTM D638
Tensile elongation	2 ~ 4 %	ASTM D638
Flexural strength	100 – 120 Mpa	ASTM D790
Flexural modulus	4.0 – 4.2 Gpa	ASTM D790
Volume shrinkage	3 - 4 %	ASTM D2566
HDT *5	60 ± 3 °C	ASTM D648
Barcol Hardness	44 ± 3	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 IK8001 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. IK8001 contains organic solvent (styrene), keep away from heat sparks and flames.
3. IK8001 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.