



## Polyester Resin IK – 900 (B)

**Product name:** IK-900B clear polyester resins for button.

**Description:** orthophetalic water clear unsaturated polyester resins with low exothermic behavior.

**Properties:** the water clarity and low exothermic behavior of IK-900B makes it suitable for button casting production the curing rate of it allows the castings to be machined cut or polished without any difficulty buttons produced with IK-900B are resilient and good resistance to laundering and ironing. IK-900B has very good compatibility with pearl essence pigment pastes and other additives used in the button production.

**Application:** IK-900B are suitable for use both sheet type and in rod stock type of button productions as they have two different viscosities a wide range of application formulas are attainable by the customers.

Clear polyester line in button production and in preparing small castings and embedding.

Typical properties of liquid resin.

Property <sup>*1</sup>	Value
Acid Value	30 ± 5 mgr KOH/gr
Appearance	Clear liquid
Solid content	65 ± 5 %
Viscosity <sup>*2</sup>	700 - 800 cps
Specific gravity	1.05 - 1.1 gr/cm <sup>3</sup>
Gel time <sup>*3</sup>	7 – 9 min
Time to Peak	17 - 22 min
Peak exotherm	110 ± 5 min
Shelf life	6 Month

\*1: Measurement was obtained under 25°C

\*2: LVT# 3-60 rpm (@) 25 °C

\*3: Cobalt 10%, 0.1 phr MEKP A 60, 1.5% (@) 25°C



## TYPICAL CLEAR CASTING PROPERTIES OF CURED

PROPERTY	ST <sup>*4</sup>	TEST METHOD
Tensile strength	45 ± 5 MPa	ASTM D638
Tensile modulus	1.8 - 2 Gpa	ASTM D638
Tensile elongation	4 - 5 %	ASTM D638
Flexural strength	100 – 110 Mpa	ASTM D790
Flexural modulus	3.8 – 4.0 Gpa	ASTM D790
Volume shrinkage	3 - 5 %	ASTM D2566
HDT <sup>*5</sup>	50 ± 5 °C	ASTM D648
Barcol Hardness	35 ± 5	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. If IK900B is blended with cobalt salt promoters shelf life will be shortened. promoted IK900B must be used within three months.
2. The gel time of IK900B 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.
3. IK900B contains organic solvent (styrene), keep away from heat sparks and flames.
4. IK900B is a potentially reactive chemical please store it in dark and keep away from heat and direct sunshine.
5. Containers not completely emptied must be closed immediately after use.

### PACKAGE:

Standard packing is 200 kg steel drum.