



Polyester Resin IK 980

Product Name: IK980 special purpose unsaturated polyester resin

description: IK980 is an orthophthalic resin specially designed for pressure – molding in the production of synthetic granite. Synthetic granite products prepared with IK-980 are resilient and have excellent mechanical and physical properties with very good chemical and weathering resistance characteristics. IK-980 may also be used successfully in fiber-reinforced applications to the advantage of the user.

Properties and applications: IK980 it is very special production of heat and vacuum assisted pressure molding of synthetic granite.

IK-980 is also suitable for use in other application areas as a general purpose ortho-resin. With its very low color values it can successfully be used for transparent applications.

Typical properties of liquid resin.

Property ^{*1}	Value
Acid Value	35 ± 5 mgr KOH/gr
Appearance	Clear liquid
Solid content	63 ± 3 %
Viscosity ^{*2}	300 - 350 cps
Specific gravity	1.05 – 1.1 gr/cm ³
Gel time ^{*3}	10 - 13 min
Time to Peak	18 - 25 min
Peak exotherm	135 ± 5 °C
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 ^{*4}	TEST METHOD
Tensile strenght	40 ± 5 MPa	ASTM D638
Tensile modulus	1.5 – 1.7 Gpa	ASTM D638
Tensile elongation	4 - 5 %	ASTM D638
Flexural strength	80 ± 5 Mpa	ASTM D790
Flexural modulus	1.8 - 2 Gpa	ASTM D790
Volume shrinkage	0 – 0.5 %	ASTM D2566
HDT ^{*5}	50 ± 5 °C	ASTM D648
Barcol Hardness	30 ± 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 IK980 is blended with cobalt salt promoters shelf life will be shortened. promoted IK980 must be used within three months.
2. The gel time of IK980 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. IK980 contains organic solvent (styrene), keep away from heat sparks and flames.
4. IK980 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.