

## ROOM TEMPERATURE CURING FILLED EPOXY CASTING COMPOUND WITH HARDENER – 555, H – 1655 AND H – 160

EC – 606 is specially developed for void free encapsulation and castings. EC – 606 is available in fluid easy to mix consistency ready for immediate application.

Bond & Bond EC – 606 can be used with any of the room temperature curing hardener such as H – 555, H – 1655 and H – 160.

EC – 606 + H – 555 is a fast curing system with a hard cured mass.

EC – 606 + H – 1655 is a medium curing system with a semi rigid cured mass.

EC – 606 + H – 160 is a slower curing system with a low exotherm and flexible cured mass.

- Good adhesion to most organic and inorganic materials.
- Good mechanical and electrical properties combined with good chemical and water resistance.
- Reduced shrinkage and exotherm.
- Low coefficient of liner expansion.
- Increased thermal conductivity.

### MIXING RATIO AND PROCESSING

#### MIXING RATIO, PARTS BY WEIGHT

EC – 606	100	100	100
H – 555	$5 \pm 0.5$	-	-
H – 1655	-	$8 \pm 0.5$	-
H – 160	-	-	$25 \pm 1$

### STANDARD PACKING : BASE :

1 KG. , 5 KG. , 25 KG. , 200 KG. IN METAL CONTAINER

**HARDENER :-** 50 G., 100 G., 250 G., 500 G. 1 kg. , 5 kg. , 25 kg. , 200 kg. In metal plastic container.

Initial viscosity of mixture at 25 °C	Poise	33.50	35.50	21.50
Pot life at 25 °C	Min	42	95	135
Exotherm	°C	43	35	32

The above system must be mixed shortly before use. The pot life depends on room temperature of the mix. The higher the temperature and larger the mix the shorter will be its pot life. Apply indirect heat to accelerate setting.

## RECOMMENDED CUREING SCHEDULE

at 20 °C      48 HOURS

at 30 °C      20 – 24 HOURS

at 40 °C      16 – 20 HOURS

The curing schedules suggested are for general guidance, In case of castings, it is recommended to give a post cure of about 4 – 6 hours at 80 °C after curing for 16 hours at room temperature.

The hardening EC – 606 + hardener mixture takes place much earlier than the suggested curing time. Hence the de molding operation or handling of the cast or potted component can be done earlier. This time should be decided in each case depending upon the mass, ambient temperature and the EC – 606 + hardener system.

EC – 606 systems are of low toxicity. However gloves are recommended. After contact wash with soap and water. Tool should wiped clean before Bond & Bond start to set.

## APPLICATIONS

- Casting, Potting and sealing of small and medium sized electrical and electronic components.
- Casting of switchgear components and insulators.
- Potting of instrument transformers.
- Cable joint insulation, with all types of cable such as PILC, PVC, Rubber insulated, etc.
- Topping of capacitors as sealant.

## CIVIL ENGINEERING APPLICATIONS

- Grouting of medium size cracks
- Repairs of concrete pavements
- Air field run-way repairs etc.

Mechanical Properties		EC-606 + H-556	EC-606 + H-1655	EC-606 + H-160
Flexural Strength	N/mm	57	56	41
Impact Strength Unnotched	J/mm	7	11	13.9
Notched	J/mm	3	3	4
Compressive strength	N/mm	95	102	66
Tensile strength	N/mm	32	29	46.3
Modules of elasticity in tension	N/mm	4800	3280	1290
Density at 25 °C	g/ml	1.6	1.5	1.44

Hardness	Shore D	83-84	80-82	72-74
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Electrical Properties		EC-606 + H-556	EC-606 + H-1655	EC-606 + H-160
Track resistance	KA	3C	3C	3C
	Kb	>600	>600	>600
Dielectric dissipation Back Test factor at R.T. E-103	(30V, 1kHz)	0.0175	0.0195	0.475

Thermal Properties		EC-606 + H-556	EC-606 + H-1655	EC-606 + H-160
Heat distortion temperature (Marten's)	C	60	50	48
Weight loss on heat ageing	%wt.	0.48	0.69	0.83

Chemical Properties		EC-606 + H-556	EC-606 + H-1655	EC-606 + H-160
Water absorption	Mg	10	11.3	10.4
Effect of chemical 25% H <sub>2</sub> SO <sub>4</sub>	7 d	Not affected	Not affected	Not affected
25% HCL		Not affected	Not affected	Not affected
25% NaOH	At R.T.	Not affected	Not affected	Not affected

### **SHELF LIFE :-**

One year in their original sealed containers.

The information contain here in is reliable and accurate the best of our knowledge. Technical services will provided for guidance when required. However conditions of uses and methods of application are beyond our control, no warranty is expressed or implied.

ALSO AVAILABLE CONSTRUCTION CHEMICALS LIKE CEMENT ADDITIVES, WATERPROOFING COATINGS, WATER REPELLENTS, CHEMICALS & ABRASION RESISTANCE FLOORINGS MATERIALS, EPOXY-POLYURETHANE RESINS, GROUTING MATERIALS, ANTI CORROSIVE PAINTS, FACADE PAINTS, SEALANTS AND ADHESIVES, RETRO REINFORCING REHABILITATION MATERIALS. FOR BUILDING, BRIDGE, DAM, CANAL, TUNNEL AND MARINE STRUCTURES, ETC

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