

Bicaseal

Solid Setting Resin Putty



Bicaseal is a two-part putty mix, supplied as individually wrapped sticks of resin and hardener, which are different in colour to aid complete mixing.

It has a usable life of 60 minutes at 20°C with an average setting time of 1 hour 30 minutes. It becomes a hard mass after approximately 4 hours. It should ideally be left, without any movement, overnight to cure fully. At reduced ambient temperatures, the setting time will increase and the mixing of the two components will become more difficult.

Before application of the putty mix, ensure that the surfaces are clean and free from oil or lubricants, and where possible roughen the surfaces to aid adhesion. Water immersion, or the presence of water, will not prevent setting. However, for good seals the surface should be dry. The maximum continuous operating temperature is 120°C.

Bicaseal putty is not affected by oils (e.g. transformer oil) and the surfaces may be painted after curing.

Handling of Prysmian Bicaseal

Equal lengths of resin and hardener should be cut from the sticks and worked together by hand. Once a uniform colour is achieved, continue mixing / kneading until the putty takes on a glossy / shiny appearance. It is important that the equal amounts of resin and putty are mixed together, as incorrect quantities will adversely affect properties of the compound.

The putty is easy to mix and starts to set as soon as mixed.

As the compound is an epoxy putty, a small proportion of users could be sensitive to it. Normal hygiene standards should be set by the user, i.e. wash hands immediately after use. Disposable plastic gloves should be worn during both mixing and application.

During cold weather, it is advantageous for the compound to be warmed to aid mixing and thus avoid damage to the gloves.

Each 0.5kg pack of Bicaseal contains two sticks each of resin and hardener, individually wrapped.

Applications include Cable Terminating.

Bicaseal can be used for capping ends of metal or PVC/XLPE sheathed cables and for sealing the crutches of PVC/XLPE cables. It can be used to make a 'wipe' between a service box and a PVC/XLPE sheathed cable. Neat plumbs can be formed with Bicaseal.

Can be used for modelling prototypes, is an excellent medium for moulding, and can be machined when fully cured.

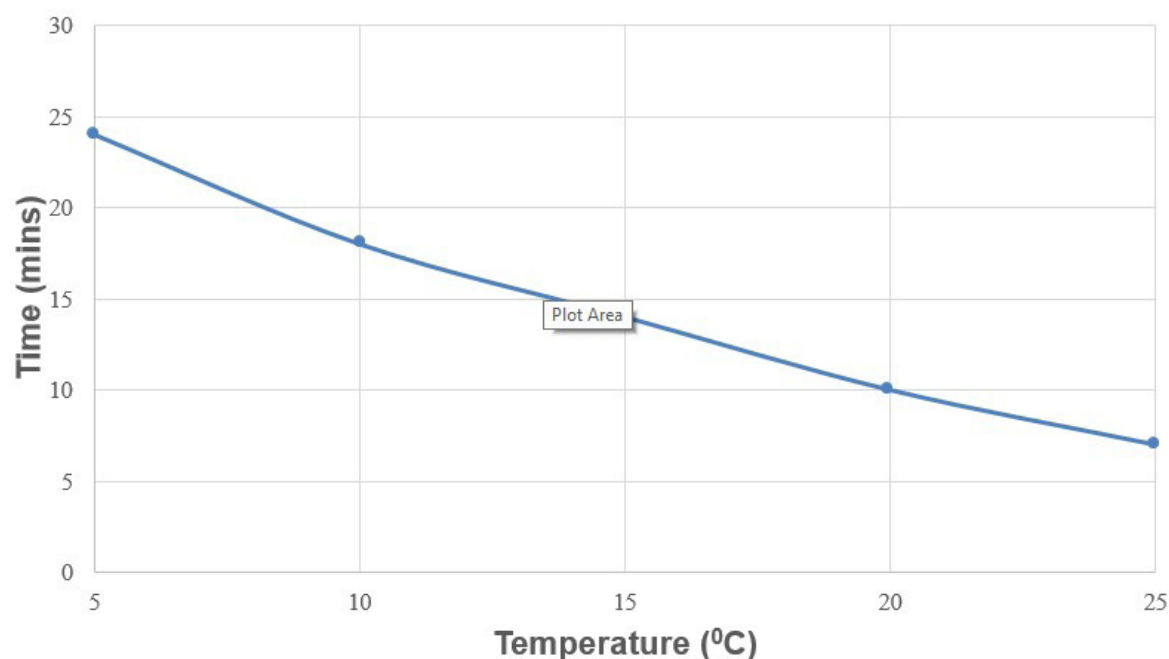
Bicaseal is an effective medium for repairs to objects made of wood, metal, ceramics etc. Adhesive joints made between most materials have good mechanical strength.

Technical Specification:

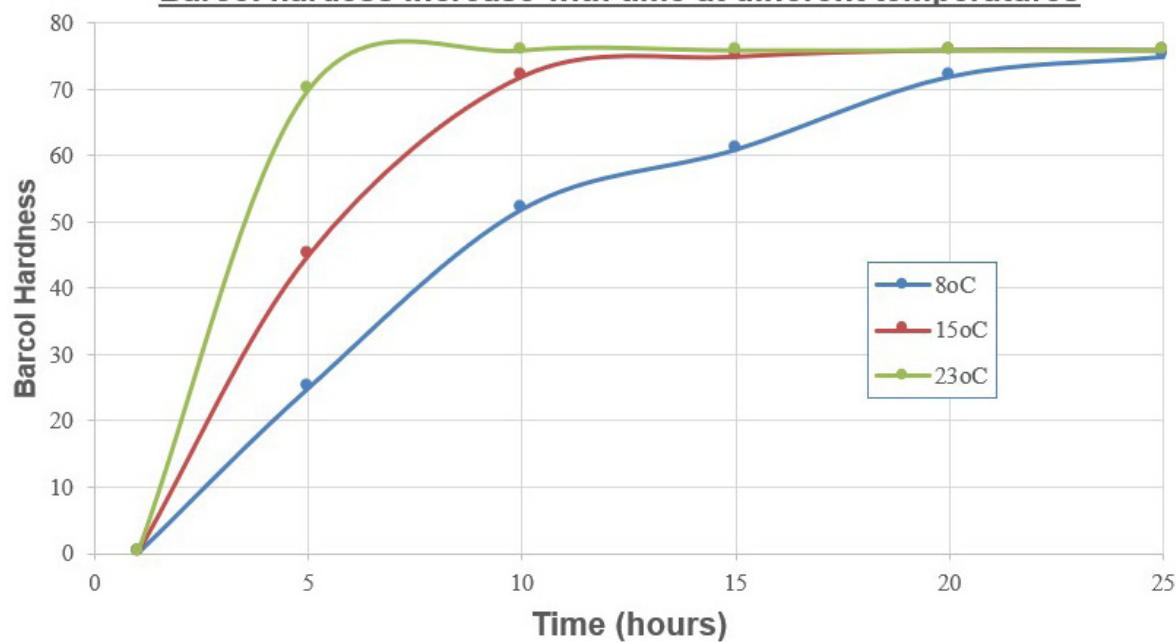
Appearance	Resin Base- Smooth red putty Activator- Smooth off white putty
Mixing Ratio	1:1 weight/weight or volume/volume
Mixed relative density	$1.8 \pm 0.02 \text{ g/cm}^3$
Cured relative density	$1.8 \pm 0.02 \text{ g/cm}^3$
Barcol hardness	75 after 7 hours at 20°C
Working life	60 minutes at 20°C
Cure time (firm consistency)	3 hours at 20°C
Cure time (optimum)	10 hours at 20°C
Minimum curing temperature	5°C
Minimum operating temperature	-40°C
Maximum continuous use temperature	120°C
Heat distortion temperature	48°C
Dielectric strength	300V/mm
Volume resistivity	$1 \times 10^{13} \Omega \cdot \text{cm}$

Bicaseal Curing Properties

Time to achieve Barcol hardness of 75° versus temperature



Barcol hardness increase with time at different temperatures



Bicaseal Chemical Resistance Data

10% Sulphuric acid	E
50% Sulphuric acid	E
Concentrated Sulphuric Acid	P
10% Hydrochloric acid	E
10% Nitric Acid	E
10% Phosphoric Acid	G
10% Sodium Hydroxide	E
5% Aluminium Sulphate	E
Brake Fluid	E
Petrol	E
Crude Oil	E
Ammonia (Household)	E
Ammonia (0.880)	P
Creosote	E
Methanol	F
Ethanol	P
10% Acetic Acid	E
Sodium Hypochlorite	E
1,1,1 Trichloroethane	E
Ferric Chloride	E
Water	E
Sea Water	E
Linseed Oil	E
Castor oil	E
Phenol	P
Cresol	P
White Spirit	E
Xylene	E
Acetone	F
Perchloroethylene	E
Turpentine	F
Benzene	G
Diethyleneglycol	P
Dibutylphthalate	E
Chlorinated Paraffin	E
Hexane	E
Ethyl Acetate	F

E	Excellent
F	Fair
G	Good
P	Poor