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# **INFORMATION GUIDE**

# LIQUID GLASS EPOXY RESIN (AND COLOURANT) APPLICATIONS

This product is designed to fill surface imperfections in timber including knot holes, and is often applied to rough sawn slabs used as table and bench tops.

Unlike other clear coatings, Liquid Glass can be applied as a very thick layer in one application (up to 20mm in one pour.)

#### Preparation

All timbers should have 1 coat of liquid glass applied by brush or roller to act as a sealing coat. Leave this coat for a minimum of 24 hours then lightly sand with 240-300 white non-clogging sandpaper. Clean with Norclean then apply your desired quantity of liquid glass. Likewise, knot holes, insects that are to be embedded, and decoupage materials, all need to be wetted out and allowed to cure overnight before continuing. The reason for this is to eliminate air pockets occurring and in the case of decoupage, photos etc. would "float" in the film and wrinkle as the resin mix becomes absorbed into the porous paper or item being encapsulated.

#### Mixing

Prime coat: Mix up 100 ml of Liquid Glass base with 50 ml of its hardener, into a clean round container and stir thoroughly until the product goes clear, without any signs of streaking.

This is important as any areas not integrated will not cure. An minimum induction period of 10 minutes is essential after mixing to enable both components to recognise each other and start the cross linking process (applies to each mix) - See further details on Induction time below.

Then apply by brush and/or roller. For knot holes use an artist's brush to thoroughly wet out all areas. The above volume will cover approximately 0.5 - 1 square metre for most timbers. Smaller mixes than 150mls will require 30 minutes induction time to create exothermic reaction. Alternatively pre-heat both products in a container of hot water for 15 minutes

### Induction / Waiting Time

After mixing components but before pouring an induction time must be observed.

At 25°c 100 - 200ml wait 30 minutes

200 - 750ml wait 15 Minutes

750ml or greater wait 10 minutes.

#### Sealing Coat:

Calculate the square to be covered and then determine how thick you require the film to be. Then determine the volume required use the following formula. **1 mixed litre of Liquid Glass equals 1,000 cubic cm. Therefore 1 sq metre @ 1 mm thick will require 1 litre.** A minimum induction period of 10 minutes is required for mixes above 750mls.

Apply masking tape to the entire perimeter and leave the tape several mm above the table/bench top. Ensure that the tape is firmly pressed into the edges so that no Liquid Glass can seep through. Any knot holes, cracks etc. that go right through the timber will need to have masking tape applied from underneath to prevent the resin from running through.

Pour the calculated volume onto the surface and spread around lightly with a squeegee and then allow it to self-level. If bubbles appear use a heat gun on a warm setting and gently wave it over the surface at a distance of approximately 30cm until the bubbles disappear.

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Leave the pour overnight or 24 hours to cure.

At that stage the Liquid Glass can be left as a finish coat if desired. However, we believe that after the masking tape has been removed the Liquid Glass should be lightly dry sanded with 400 grit clog free sand paper, and wiped down with NORCLEAN-PLUS. Then we recommend a coat of NORTHANE Clear should be applied by brush, mohair roller, or spray.

This product when cured, (after 48 hours) is food safe and will not support bacteria on the film. Northane Clear will also tolerate hot coffee cups on the surface and will not stain. Although Northane Clear may appear to be cured overnight, placing any items on the finish within 48 hours will cause imprinting. After the curing period, Northane Clear is waterproof, and chemically resistant, so spillages will not affect the finish.

### Other things you should know:

- Liquid Glass must not be mixed in the presence of Ultra-Violet light i.e. fish tanks as the coating will go yellow within a few hours.
- Mixing very small quantities of Liquid Glass (or less than 100 mls) will result in a longer curing time, because the mass will only generate a small exothermic reaction (i.e. heat)
- Volumes greater than 20 mm thick, should be done in separate pours, otherwise the heat generated can cause the mass to crack as the exothermic reaction (heat) can be excessive.
- Where small volumes are required DO NOT use syringes with liquid glass as the plungers are treated with silicone to allow smooth movement within the tube. The silicone will then transfer onto the job and create cratering or fish eyes.
- Tack off time can be 4-5 hours @20°c (subject to mass.)
  Working time is 20-30 minutes @ 20°c.
  90% curing time is 24 hours @ 20°c. the residual balance may take up to 7 days.
- Use a heat gun waved over the Liquid Glass during the settling process to remove any bubbles in the resin if necessary. However, if contemplated, this will warm the area and accelerate the curing at that point, heat from a heat gun should be used sparingly.
- Do not use any solvent other than Norclean-Plus to wipe the surface down.
- If multiple coats of Liquid Glass are to be applied after a fully cured period, light sanding with 240-300 grit clog free sand paper must occur to provide inter-coat adhesion. This dulling of the surface will disappear as the next coat is applied, or when Northane clear is applied.
- Northane clear is available in gloss or satin finish.

# **USING LIQUID GLASS COLOURANT**

Take off twist cap and carefully remove shipping seal. Replace twist cap lid. **Shake bottle well before every use.** 

Pour a measured amount of liquid glass base into a clean, clear glass container. Slowly add the amount of colourant required. *Note: No more than 25ml of colourant should be added to 750ml of Liquid Glass.* Amount required depends on the shade you are after, please note adding the clear hardener reduces the colour intensity.

Stir slowly but thoroughly.

Now add the required hardener and again stir through thoroughly.

The curing time will be extended by approx 10 minutes by adding the colourant.

Colourants can be intermixed to produce your own custom colours. It is recommended you experiment with a small sample batch first to confirm your desired colour.

Keep notes on your mixes in case you need to replicate the colour at a later date.