

## 6.8 Two component systems (Epoxy - Polyurethane - Polyurea)

# DECO LIQUID GLASS Liquid glass resin



### TECHNICAL SPECIFICATIONS

Chemical base	Two component epoxy resin without solvents
Color (A + B)	Transparent
Mixture density	1.05 ± 0.04 kg/lt
Mixing ratio A:B	100:55 by weight
Pot life	40-50 minutes at +20 °C
Application temperature	From +10 °C to +35 °C
Initial cure	4-6 hours at 20 °C
Full cure	4-7 days, depending on the coat thickness, the ambient temperature and humidity

#### V.O.C. (Volatile Organic Compounds):

Limit value of maximum content of V.O.C. per EU (Directive 2004/42/EC) for this product (category A1j): 'Two-pack performance coatings', Type SB): 500gr/lt (2010). The ready to use product contains maximum 0gr/lt V.O.C.

### CLEANING

Clean all tools with THINNER 201 of DUROSTICK, immediately after use.

### CONSUMPTION

**As pouring/casting product:** 1 kg/m<sup>2</sup>/mm thick coat.

Indicatively, for a tabletop with a diameter of 70cm and a thickness of 4cm, the necessary amount of DECO LIQUID GLASS is about 15kg.

**As a top coat or varnish:** Approximately 200gr/m<sup>2</sup>/coat, on properly prepared surfaces and always depending on their absorbency.

### STORAGE

Store in tightly closed containers, in dry and shaded places, for at least 12 months from production date.

### SAFETY DIRECTIONS

The product is classified as irritant. It is recommended to keep away from the reach of children. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

### PACKAGING

Carton box with 12 pcs of 375gr each one (A: 240gr, B: 135gr)  
3kg container (A: 1.930gr, B: 1.070gr)  
5kg container (A: 3.217gr, B: 1.783gr)

### PROPERTIES

Clear, two-component, solvent-free epoxy resin, suitable for creating and protecting a multitude of decorative applications and interior space surfaces. After curing, a glass-like finish surface with high clarity is created. Classified as SR-B2.0-AR0.5-IR4 per EN 13813.

### ADVANTAGES

- Exceptional mechanical strength and adhesion
- Resistant to moisture
- Resistant to most chemicals, acids, alkalis, seawater or chlorinated water
- Ability to create colored constructs and coatings.

### APPLICATIONS

DECO LIQUID GLASS is ideal to be applied either as a pouring/casting product or as a coating material in a multitude of substrates, due to its physical shape (liquid glass). The most well-known application of the product relates to the 'encapsulation-encasement' of materials such as pebbles, shells, sea sand, leaves, flowers, butterflies, legumes, nuts, decorative woods, veneers, pictures, banknotes, coins, collectables etc. Another popular application relates to clear or even colored coatings on microcemento and decorative rocks. Dozens of highly decorative and easy applications have been showcased on the internet. Those applications will assist the creation of unique designs with our stamp and personal aesthetic footprint.

### USE

#### 1. Surface preparation

All application surfaces must be dry and free of dust, oils etc. Cementitious surfaces must be flat, sound and free of loose materials, dust, fat, oils and they must be completely dry. The moisture content of the substrate should not exceed 5% and the relative humidity in the application area should be less than 65%.

#### 2. Application

Empty the content of container B into container A and stir with a low-rpm drill for 2-3 minutes until the complete homogenization of the mixture. Let the mixture rest for a few minutes before applying. Alternatively, mix the two components with a spatula, with slow, circular motions, for about 4-5 minutes. In both cases, when mixing the two components, great care should be taken to ensure that the mixing is done calmly,

so that air is not entrapped in its mass and bubbles are created.

Also, mixing should be done both on the sides as well as at the bottom of the container, in order for the hardener to be uniformly distributed and to be homogenized properly. After the application, any air bubbles created should be burst immediately, using a heat gun or any other hot air device.

### Application – Coloration & Style creation with DECO LIQUID GLASS

Use DECO LIQUID GLASS to create colored constructs or coatings with:

- The DUROCOLOR measuring system for shade rendering, available in 20ml syringe packaging, creating 120 colors. Now available in white, for the creation of special projects and crafts.
- Mixing decorative ultrafine metallic pigments LUSSO D'ORO, available in gold, silver, copper, creating irises and multicolor shades.

For coloring the entire construct or the coating of a construct (mainly floor applications) and **immediately after the two components are mixed**, add one or many colors from the DUROCOLOR pigments of your choice into the mix to create unique styles, depending on the aesthetic requirements of the application. Indicatively, for 1m<sup>2</sup> of 2mm thick liquid glass, you will need approximately one DUROCOLOR syringe 20ml.

For coloring the entire construct or the coating, add a small amount of the pigment of choice into component A and mix until the pigment has completely homogenized. Add component B (hardener) and mix thoroughly.

For coloring the first coat or the in-between coat (to create a background/backlight effect), follow the above coloring procedure but use a smaller amount of resin and pigment(s), always depending on the application. Please keep in mind that the pigment amount must be very small in order for the liquid glass to have a different shade, but also to remain clear.

### Application as casting material, brushable coating or flooring coating material

**Application in molds:** Create the mold using flexible materials, such as nylon sheets or polyethylene containers. For example, we can create containers for different spaces by placing a small container into a larger one and to add pebbles, small shells or anything else that our imagination might demand and create numerous unique pots for various spaces. Special forms and molds in

artistic, but also in other original shapes are available on the market. They are reusable and involve the manufacture of jewellery and other constructs in various patterns, designs and dimensions.

**Application in metallic hoops (wine barrel hoop bands or machined frames):** After spraying them with the liquid silicone spray, SILICONE SPRAY of DUROSTICK on a flat nylon surface, various materials can be incorporated e.g. pebbles, clams, nuts and everything else, with only limit one's imagination. In this way, we create tops 3-4cm thick, for tables with exceptional aesthetic value. Apply the product in 3-4 successive coats, to prevent air bubbles from being trapped within its mass.

**Constructions of stained glass type or imitation:** On glass, plexiglass or thick plastic, but also in plywood or sheet metal mold, you can choose the colors of your choice and create unique constructs. Also, everyday use glassware and items such as candlesticks, lanterns, lamps, light fixtures, can be renewed by coating them with colored liquid glass, obtaining a stained glass look. In this case, the internet can be a valuable guide to provide you with many original ideas. Remember that your creations will 'shine' even more if you place them at a point where a candle or a dim light fixture can be placed behind them.

**With the addition of LUSSO D'ORO metallic pigments, available in practical 70ml vials, into component A before mixing it with component B, liquid glass DECO LIQUID GLASS is also applied to:**

**Large or small size statues** made of plaster, cement or polyester, the appearance of which is converted into metal, e.g. gold or silver.

**Decorative plaster crown moldings**, offering decoration of classical aesthetics for interior spaces.

**Cement or ceramic pots and planters and other decorative items** are transformed by completely altering their aesthetic, form and value.

**Decorative floors:** On a sufficiently cured cement substrate (28 days after pouring) and after having the surface protected from moisture by applying the flexible and brushable cement mortar D-1 FLEX of DUROSTICK (available in white or

gray color), encase any material of aesthetic choice and value, such as fiber optics, LED lighting strips etc., giving life to the application surface. Excellent decoration option for swimming pools or fountains.

It is also suitable to be applied as a varnish for decoration and protection of surfaces made of wood, metal, clay, ceramics, stone, concrete etc., provided they are clean and completely dry.

### USEFUL TIPS - NOTES

- Not suitable for exposure to solar radiation (becomes cloudy).
- Casting on molds should be done in a coat of 10-15mm thick. If done in two or more coats, each additional coat should be poured once the former has started to set.
- For the best use of all molds, it is deemed necessary to spray them with the SILICONE SPRAY of DUROSTICK.
- After curing, any mold imperfections can be sanded down with common sandpaper and be polished until it is glass-like.
- When applying as varnish or coating, do so using a roller, brush or plastic trowel, depending on the surface.
- For floor applications, the coat thickness should not be less than 1.5-2mm and the maximum application thickness per coat should not exceed 6mm. For thicker coats, apply additional coats.
- If the product is used as a varnish or as floor coating and there is a need to apply a second coat, it should be applied within the drying time of the 1st coat. If not, the first coat must be sanded enough, so as to remove the gloss finish. Then clean thoroughly all the dust and grease to ensure good adhesion between the two.
- On continuous floor surfaces, there is no need to create expansion joints.
- Only mix as much as you can use, because the mixture starts to harden quickly.
- If you are not going to use the entire package, weigh accurately the two

components before mixing them together. You will need glasses or containers, as well as a disposable mixing attachment. For weighing, use a precision scale or syringes, for even smaller quantities.

- The mixing ratio of component A to component B (hardener) is 100/55.
- Until curing, the product should not be exposed to moisture and dust.

### NOTES

- Epoxy systems are sensitive to ambient temperature and humidity, until their final cure. Pot life is reduced with increased ambient temperatures. Dull or discolored spots appear on the surface and curing time increases at high humidity conditions.
- After mixing the two components, the mixture temperature increases.
- After hardening, the product is harmless to health and the environment.

## LIQUID GLASS STYLES IN COMBINATION WITH DUROCOLOR SYRINGES

