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VETRO LIQUIDO

High thickness resin for stamps and tables

Product's Characteristics

VETRO LIQUIDO is a clear epoxy resin with excellent anti-yellowing strength.

Possible Uses

VETRO LIQUIDO can be used to create objects, piece of furniture and tables.

Support's Preparation

VETRO LIQUIDO can be cast inside surface with filler effect or inside re-usable stamps to achieve the desired shape. Due to the fact that You have to remove the dry resin, the stamp has to be made of specific plastic material or treated by a releasing product.

Product's Preparation

Check and homogenise the two components before the use.

Mix the two components (resin and hardener) in right quantities with a mechanical mixer at very low speed, avoiding to incorporate air, until you achieve an homogeneous mixture, then pour.

For manual mixing it is advisable to mix thoroughly with special crooked spatulas, taking care to mix well the bottom of the container and the walls: pour complete can into can several times to ensure complete mixing of the whole product.

Application Method

a) TRANSPARENT FILLING

After proper preparation of VETRO LIQUIDO, cast it inside the stamp taking care to distribute the product on a uniform and homogeneous way on the desired thickness.

The maximum thicknesses of the castings strongly depend on the material of the mold, its dimensions and the ambient temperature. For thicknesses over 20-30 mm or for more than 5 kg at a time, it is advisable to contact the technical office at 031 905163.

b) ENGLOBE OF COLOURED PIGMENTS, GLITTER, POWDERS, ...

Mix on the desired quantity pigments, glitter or metallic powder with already hardened VETRO LIQUIDO taking care to mix it until the achievement of an homogeneous mixture; then cast the product inside the stamp as written in point a). It's advisable to test this kind of finishing before object or table's realization to check the outcome.

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More info about the application of VETRO LIQUIDO at page 3.



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Technical Features

| TECHNICAL DATA | UNIT of MEASUREMENT | VALUE PART A | VALUE PART B |
|-------------------------------|------------------------|-------------------------|-------------------------|
| Colour | - | Colourless, transparent | Colourless, transparent |
| Viscosity at 25 °C | mPas | 600 - 800 | 60 - 80 |
| Density at 25 °C | g/mL | 1,09 – 1,12 | 0,95 – 1,00 |
| Mixing ratio VETRO LIQUIDO B | % p/p | 100 | 40 |
| Mixing ratio VETRO LIQUIDO BT | % p/p | 100 | 40 |

System's Features

| TECHNICAL DATA | UNIT of MEASUREMENT | VALUE PART A |
|--------------------------|------------------------|--------------|
| Colour | - | Colourless |
| Density at 25 °C | g/mL | 1,05 – 1,10 |
| Maximum Glass Transition | °C | 50 - 55 |

- Time of use (200 mL, 40 mm, +25°C): more than 2 h
- *Mould removal time (15 mL, 5 mm, +25°C)*: with VETRO LIQUIDO BT: about 12 h

with VETRO LIQUIDO B: about 48 h

• Maximum thickness: with VETRO LIQUIDO BT: about 8 mm

with VETRO LIQUIDO B: about 60 mm

Thickness of resin casting highly depends by stamp material, its size and room temperature

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Packaging

VETRO LIQUIDO (A) + VETRO LIQUIDO (B)

- 1,40 kg kit (1 kg A + 400 g B)
- 7 kg kit (5 kg A + 2 kg B)
- 28 kg kit (20 kg A + 8 kg B)

VETRO LIQUIDO (B) – T

- 400 g
- 2 Kg
- 8 Kg



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Storage and Precautions

The epoxy resins can be stored for 2 years, the relative hardeners for one, in tightly closed containers and in a cool, dry environment.

Hardeners are also sensitive to moisture.

APPLICATION INFO ABOUT VETRO LIQUIDO

- Cleaning of the "moving" parts not fixed to the wood, the wood must be well seasoned (possibly treated in the dryer), any contained humidity, over time, could create bleaching on the surface of contact between wood and resin, as well as leading to movements of excessive settling
- The direct application of the resin could create a "wet" effect, thus changing the aesthetic appearance of the wood, to keep its appearance as unaltered as possible, it is possible to insulate the surfaces with PRIMER 3PL TRASPARENTE, then proceeding with the application of the resin (wait at least 4 hours or at least the complete drying of the primer). The use of the primer involves only a different final aesthetic effect
- Preparation of a containing "stamp" that will give the shape to the casting; it is possible to make it in wood by covering all the parts that come into contact with the resin with packing tape, taking care to create a completely hermetic container (the resin, once poured, behaves like water).
- Insulation of the surfaces to be treated using the resin VETRO LIQUIDO hardened at 40% by weight with the rapid hardener VETRO LIQUIDO BT, application by brush, drying time and over-application about 10 hours, repeat the operation at least 2 times, according to wood absorption.
 It is important to isolate the surfaces very well, so as to create a protective layer that prevents the formation of air bubbles once the resin has been cast in thickness.
- Using the resin VETRO LIQUIDO hardened at 40% by weight with the rapid hardener VETRO LIQUIDO BT make a casting of 1/2 mm and position the table which have to be englobed, making it adhere as closely as possible to the bottom of the container, taking care to let out any air bubbles present under the table as much as possible, you can use a heat gun to eliminate excess air bubbles present.
- After 10/12 hours, using the resin VETRO LIQUIDO hardened at 40% by weight with the standard hardener VETRO LIQUIDO B, carry out one or more successive castings until reaching the upper level of the wood, so as to obtain a single wood surface / resin (at least 2/3 days must elapse between one casting and another). For thicknesses over 20-30 mm or for more than 5 kg at a time, it is advisable to contact the technical office at 031 905163.
- At complete drying, proceed with the dismantling of the "stamp" and with the operations of sanding and polishing for the final wood/resin effect



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The pieces obtained in wood and resin can be calibrated, cut and sanded / polished using typical joinery equipment and machinery, it is also possible to overlay with water or solvent-based protective clearcoats after sanding with 600/1000 papers

<u>It's essential to work in suitable environments, recommended ambient temperature at least 18/20 ° C.</u> The optimal temperature of the liquid resin at the time of casting is instead equal to 25 ° C.

The times and thicknesses shown in this report are indicative as they're strongly influenced by the operating and application conditions, by the size of the casting and by the mass of resin used, so each process may require different times and different preparations

Product's consumption: about 1,1 kg/sqm each mm thickness

Depending on the size of the casting, a maximum volume decrease of 3/4% can occur

VETRO LIQUIDO has no adhesion on POLYPROPYLENE and PVC, therefore it's possible to use these materials for the creation of moulds or formworks created for the embedding of objects, it's also possible to cover other materials with the common packing tape (in the case of PVC, it is advisable to carry out a preventive test).

The sanding and polishing operations are the same as those used for polishing glossy lacquered finishes, indicatively the following steps can be performed in succession, paper P120, P300, P600, P1000, P2000 and polishing with POLISH or similar

Before using ELEKTA RESINE's products it's advisable to participate to the CORSO DEL RESINATORE or to contact the ELEKTA LAB assistance service.

For further information contact the technical office Gruppo GANI at the number +39.031.905163.

The information contained in this technical card are based on the common experience in the sector, without specific implicit or explicit guarantee. The application and the use of our products take place outside our control possibilities and so those fall down under the exclusive responsibility of the user.