Verinlegno ,innovation, research, dvelopment

Verinlegno chosen **Quality** as its corporate mission thus ensuring very performing, safe and innovative products.
Improvement, evolution and increase of the range are unavoidable to meet customers' need with responsiveness and flexibility.
The awareness for **safety** and for environment is essential for the whole production path thanks to top level technicians who are able to combine their skills as of the features and as for the use of innovativematerials with their accurate knowledge of new technologies.
Verinlegno mission is characterized by its **research for eco-sustainability** to set up products with a low impact on the environment which safeguard the users' health. We pursue this objective together with the corporate growth, thanks to our investments which have
constantly this aim.

Verinlegno S.p.A.
Via Galvani, 7 - 51010 Massa e Cozzile (PT)
Zona Industriale - Italy
Tel. +39 0572 92711 - Fax +39 0572 773608
Partita IVA 00230480477
Info@verinlegno.it

Azienda con sistema di gestione per la Qualità certificato secondo la norma UNI EN ISO 9001:2015

FEDERCHIMICA AVISA GRUPPO PITTURE E VERNICI

Responsible Care® OUR COMMITMENT TO SUSTAINABILITY

VERINLEGNO LE VERNICI

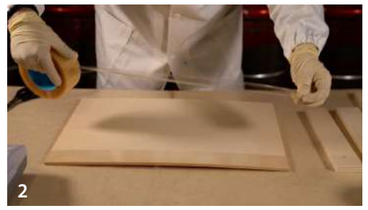
CRYSTAL EPOX

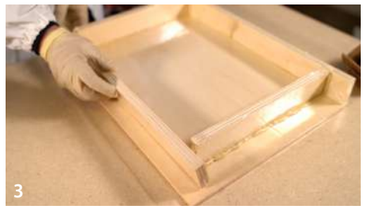
1 - ISOLATION OF SUPPORT

Isolate the support by applying by brush the product **ALE02229**, catalyzed at 25% with **01I00881 - INDURITORE 881 RAPIDO EPOX D1** in order to eliminate to the maximum the leakage of air from the wood.
It is recommended to repeat the operation at least two times, 6-8 hours apart.

2 - CASTING CONTAINER PREPARATION

It is recommended to prepare the casting container using materials that are easy to detach, taking care to adequately isolate the container with scotch tape and silicone.





3 - PREPARATION OF CRYSTAL EPOX 5191 E

Prepare the product **CRYSTAL EPOX 5191E** catalyzed at 30% with **CAT. CRYSTAL EPOX 5189E**.
Stir carefully, avoiding the formation of air inside the mixture as much as possible, taking care to completely dissolve the catalyst.

4 - POURING

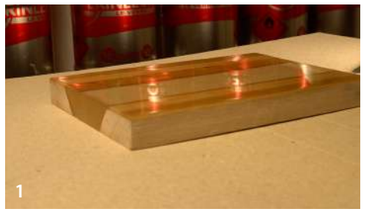
Pour the mixture prepared with a constant and homogeneous flow so as to avoid as much as possible formation of air bubbles
In order to eliminate the air bubbles, that will inevitably form inside the film, it is recommended to use industrial hair dryer or blowpipe. After 72 hours, eventually make a second casting.

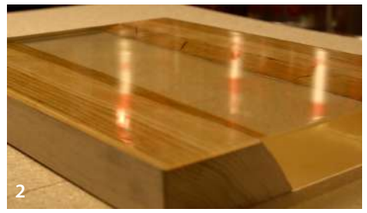
5 - DISARMAMENT-DETACHMENT

After drying (about 72 hours), disarm the casting container and trim the substrate.
The time required for proceeding to disarm the mold depends on the mass of the casting and the ambient temperature; as the ambient temperature and / or mass increase, the hardening and disarming times decrease.
Subsequently it is possible to shape up the product with various processes, such as cutting with wooden tools (circular saws-planers) and sanding.

6 - POLISHING

Sand the surface with abrasive papers (from 220 to 6000). Afterwards, polish with abrasive paste and Polish.





The product is thermoplastic so that an energetic sanding tends to soften the film; it is advisable not to heat the panel too much and to use as much paper as possible (6000) to eliminate the signs of the orbitals of the previous cards. For perfect sanding it is preferable to wait a week before the final polishing phases.

NOTES

DRYING TIME

- **RETICULATION TIME**. It depends on the thickness of the casting; few millimetres need a much longer time (about 48 hours). Some centimetres engender a more exothermal reaction, with the hardening beginning after 36 hours. Moreover, the lower the temperatures the longer the times.
- **INITIAL RETICULATION**. 72 hours at 20°C: the film proves to be hard and it is possible to remove it from the mould or it proves to be ready for a second casting, but it has not fully reacted yet and therefore it has not acquired the final physical and chemical features. Times get longer as temperatures get lower
- **FINAL RETICULATION**. 5 days at 20°C: the film has completely reacted and has totally polymerized. It is possible to continue with the trimming/polishing operations etc. Times get longer as temperatures get lower.

PIGMENTATION

It is possible to pigment the product with transparent, soluble dyes series CMS.
It is possible to pigment the product using PU concentrated pastes.
It is possible to add nacre powder or glitter to the product.

HIGH THICKNESSES

It is suggested working with multiple castings with high thicknesses to better remove the included air, as well.
In order to obtain a transparent and crystalline product it is essential for the temperature of the polymer not to increase excessively during the phase of reticulation.
The reaction is always exothermal, but some conditions considerably affect the temperature increase.
The increase in temperature is responsible for the change of transparency and above all of colour of the resin which will tend to turn yellow.
The exothermal reaction essentially depends on two factors, the temperature of the work environment and the mass of the casting meant as the ratio between the casting volume and its thickness: for example, it is possible to have very high thicknesses but with low volume and to keep the reaction contained.
If, on the contrary, we have very high thicknesses on very wide surfaces, we will have a huge mass of polymer which will trigger off a strongly exothermal reaction UP TO 160°C which will "burn" the resin making it turn even yellower.

For details, please refer to the Technical Data Sheet and the video tutorial.