

# VERZINKSHOP ELECTROFORMING SEALER MANUAL

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## ELECTROFORMING SEALER

The Electroforming Acrylic Sealer is used to prepare various materials for the electroforming process. You apply the sealer before the conductive paint; It forms a waterproof, hard layer that seals the surface. This way, the conductive paint adheres better and you prevent problems (moisture, pollution) during electroforming.

## FOR POROUS, SOFT OR ORGANIC MATERIALS

Porous, soft or organic objects must first be sealed: think of baby shoes and textiles, tree bark and dried flowers, lava stone/pumice, paper/cardboard and untreated wood. Such materials absorb liquid through the pores.

The electroforming sealer completely encloses the object and after drying forms a waterproof film that saturates and seals pores and fibers. As a result, the copper electrolyte can no longer penetrate the object if the conductive paint later contains small imperfections (hairline cracks, pinpricks).

- No bath pollution: organic material cannot dissolve in the bath.
- Less risk of blowing/cracking: no moisture gets into the substrate that expands or forms gas (outgassing) during electroplating, so you prevent cracking and peeling of the copper or paint layers.
- Mechanical stability: fibrous or soft surfaces are reinforced, making them easier to handle during painting and in the bath.

### Practical guidelines

- Highly porous: fully submerge and repeat a few times to remove air bubbles. Leave on for a few minutes. Shake off excess sealer, then let it dry completely (for very thick material, such as a shoe, 1–2 days is realistic).
- Moderately porous / thin supports (sheet, paper, wood): Dip, apply with a brush or airbrush in 1–2 thin layers. One layer retains the most detail; A second layer evens out the surface.

Always let it dry completely before applying the conductive paint.

## APPLICATION

Choose the method based on porosity and the material.

### 1) Immersion (recommended for highly porous materials)

- Hang the object on nylon or copper wire.
- Fully submerge and move the piece up/down a few times to remove air bubbles.
- Leave on for a few minutes so that pores saturate.
- Take out, shake off excess sealer (no compressed air).
- Allow to dry thoroughly; Time depends on material and layer thickness. For e.g. a shoe: 1–2 days is realistic.

### 2) Brushing / Airbrushing (for less porous surfaces)

- Apply thinly, evenly.
- 1 layer preserves fine details; 2 layers gives a smoother result.
- Let intermediate layers dry until dust-dry before you put on the next layer.

## TECHNICAL INFORMATION

Thickness of the layer: depending on the substrate.

pH value: Approximately 9.9

Flash point: None (the sealer is non-flammable)

Percentage of solids: 16.5%

Fabric dry: depending on the surface.

Dilution: Use undiluted.

Storage: Store in polypropylene, polyethylene, stainless steel or fiberglass containers; Tightly sealed to prevent contamination and evaporation

## **WARNING!**

Electroforming Sealer is not a hazardous product in normal use. Avoid contact with eyes and skin.

Do not work with Verzinkshop products without first reading and understanding the SAFETY INFORMATION.

The safety data sheet can be found on the product page or can be requested from Verzinkshop.nl by e-mail: [info@verzinkshop.nl](mailto:info@verzinkshop.nl)

Do you have any questions? Contact us via:

Mail: [info@verzinkshop.nl](mailto:info@verzinkshop.nl)

Whatsapp or call: +31 6 28090022

[WWW.VERZINKSHOP.NL](http://WWW.VERZINKSHOP.NL)

## **SAFETY**

ALWAYS wear a dust mask, respirator, gloves, and apron when necessary.

ALWAYS treat any chemical as if it could kill you.

ALWAYS label buckets and storage containers with a permanent marker so that you and others know what's inside.

NEVER pour water into acid; it can heat up and explode. ALWAYS pour acid into water.

NEVER leave electroplating pools or other systems that use power unattended. These products may cause a short circuit and cause a fire.

NEVER come into direct contact with chemicals. They can cause serious burns or other damage and are very dangerous substances if not treated with respect.

NEVER THINK you can get away without taking safety precautions! That is not possible!

NEVER leave the lids off the tanks when not in use. They WILL fall over!

Always work safely and ensure good protection and ventilation.

The safety data sheet can be found on the product page or can be requested from Verzinkshop.nl by e-mail: [info@verzinkshop.nl](mailto:info@verzinkshop.nl)

## **DISCLAIMER**

Did you find an error or something unclear in the manual? Please let us know via [info@verzinkshop.nl](mailto:info@verzinkshop.nl)

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