VERZINKSHOP DEEPSEAL METAL SEALER MANUAL

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DEEP SEAL METAL SEALER

DeepSeal galvanizing shop is a professional, water-dissipating metal-sealer on oil/solvent basis with calcium-based corrosion inhibitors.

The transparent film penetrates pores and recesses, expelling moisture and leaving a uniform, polar, non-conductive protective layer. The film remains stable at high humidity and elevated temperature. DeepSeal is usually safe on plastic, rubber, paint and some silicones (test first)

SUPPLIES & MATERIAL CHOICE

- Sealer tank & equipment: mild steel is suitable for DeepSeal.
- Cover: always cover tank when not in use to limit evaporation.
- Ventilation & PPE: work with good ventilation and wear appropriate PPE.

APPLICATION – METHODS

DeepSeal can be applied by:

- Dipping (recommended after chemical blackening)
- Brush/sponge (swab-on)
- Low-pressure sprayer

SUGGESTED USE

DeepSeal is used undiluted and can be applied to wet or dry parts, both on bare metals and on surfaces with a chemical conversion coating (such as cold black oxide or patinas). Very suitable as a sealer for:

- Bare metals for storage
- Verzinkshop Black Oxide / Black Oxide Ultra
- Verzinkshop Black Stainless Steel Oxide
- Verzinkshop Patina products

Typical applications: tools, dies, machinery, firearms, fasteners, automotive and marine parts, and general metal surfaces for protection during processing or storage.

PROPERTIES

Technical characteristics of the sealer:

- Finish: very slightly oily, dries dust-dry
- Coverage: ± 50 m² per liter
- Film thickness (dipping): ± 0.003 mm
- Flash point: 52 °C
- Moisture Test (ASTM D1748): 64 days (typical)
- Salt Spray Test (ASTM B117): 70–90 hours (typical)
- Other services:
    - MIL-PRF-16173E (Displacement)
    - MIL-C-23411
    - MIL-C-81309
    - MIL-C-22235A (stain)
- Drying / curing at 20–22 °C, good ventilation:
    - Dust-dry / touch-dry: 5–10 min
    - Manageable / light use: 30–60 min
    - Final Result (Color/Protection Stabilized): 12–24 hours

(Cool/cold, thick films, little ventilation, or highly porous substrates extend these times.)

APPLICATION

PREPARATION

Cleaning/degreasing: use an alkaline degreaser; Rinse and drain well.

Surface condition: dry or "wet from rinsing" is allowed. In wet parts, focus on water displacement.

PROCESS STEPS

Dipping: Part 4–6× moving fully in and out of the bath to expel water from pores/cavities; Then leave on in the bath for 2–5 minutes.

Brush/sponge/sprayer: apply generously and keep "wet" until visible no more water returns to edges/holes; Repeat briefly if necessary.

Drain/shake off: drain excess sealer back into the tank. Do not use compressed air.

Drying: handle the properties (dust-dry 5–10 min; manageable 30–60 min; final result 12–24 hours).

BATH MAINTENANCE

Water separation: DeepSeal expels rinse water to the bottom of the tank. Drain this periodically.

Sight glass (recommended): install a sight glass for large tanks to check the water level and prevent work from entering water instead of sealer.

Baskets/drums: Do not dip baskets or rotating vessels used in previous process baths into the sealer (prevents contamination).

Cover: keep tank covered when not in use; Limits evaporation and pollution.

SEALER REMOVAL

DeepSeal can be removed with:

Solvents (e.g. hydrocarbon cleaners)

Chlorinated solvents (as in vapour degreasing, where permitted)

Strong alkaline cleanersAfter removal: rinse according to the cleaning agent and dry parts again.

WARNING!

DeepSeal is a flammable liquid. Keep away from open flames and other sources of heat. Avoid contact with eyes, skin and clothing. Wear eye protection (goggles, goggles, or face shield), protective rubber gloves, and aprons when preparing solutions and while working with the solutions. The sealer is toxic when used internally.

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

Do you have any questions? Contact us via:

Mail: info@verzinkshop.nl

Whatsapp or call: +31 6 28090022

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

DISCLAIMER

Did you find an error or something unclear in the manual? Please let us know via info@verzinkshop.nl

We put together our manuals with care. However, no rights can be derived from the content. Processes and results depend on circumstances beyond our control. Therefore, always test for test/scrap material first and work according to the SDS and with appropriate PPE. To the fullest extent permitted by law, we are not liable for (i) indirect or consequential damages (including depreciation of workpieces), (ii) damages due to improper use or interpretation of the documentation, or (iii) typographical and typesetting errors. Our total liability is limited to replacement of the delivered product or refund of the purchase price. This does not apply to intent or deliberate recklessness on our part and does not affect your mandatory (consumer) rights.