V-BRITE X

Copper maintenance brightener

V-Brite X is the maintenance brightener for V-Brite 100 and V-Brite 200 copper baths. It is used when making a new bath and later to replace brightener consumed during plating. X does not replace the matching starter. Do not use it in another type of electrolyte without advice.

Dose for each system

Copper bath	X when making a new bath	Typical consumption
V-Brite 100	1.5 ml per litre	About 1 ml per 2 ampere-hours
V-Brite 200	1 ml per litre	About 1 ml per 2-3 ampere-hours

A new bath also needs its starter: 6 ml of V-Brite 100S per litre or 7 ml of V-Brite 200S per litre. Follow the relevant system manual. Add starter and X separately to the bath; do not mix the concentrates together beforehand.

> **Ready-to-use electrolyte already contains brightener.**
> Do not add the initial dose again to a ready-to-use Verzinkshop bath. Once in use, maintain it according to consumption and the result on a test piece.

Calculating consumption

Multiply current in amperes by time in hours. Example: **2 A × 3 hours = 6 ampere-hours**. Expected consumption is about **3 ml of X for V-Brite 100** or **2-3 ml of X for V-Brite 200**. This applies to the whole bath; do not multiply it by the number of litres.

Adding brightener and testing

1. If brightness falls, first check temperature, contacts, cleaning, solution movement and current. Use 0.2 A per 10 cm² of workpiece surface for both systems.
2. Check how much X you have already added and how many ampere-hours the bath has run. Make a measured addition based on the likely shortfall, where the bath is circulating well.
3. Allow it to mix thoroughly, then plate a clean copper test piece connected to negative. Keep the copper anodes connected to positive. Check the result before adding more.
4. If the result does not improve, stop adding X. Have the chloride, copper and acid levels checked too. A dull coating can have several causes.

Keep a simple record of operating hours, current and millilitres added. Consumption figures are a guide; temperature, workpieces and solution losses affect the actual requirement.

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Maintenance and safety

After idle periods or filter treatment

Plate a test piece after an idle period. Add X only if needed; do not automatically add it because the bath has stood for a few days. Do not use activated carbon in the filter while plating, as it removes brighteners. After a targeted carbon treatment, use a bath test to determine how much starter and X are needed again. Ordinary particle filtration is not a reason to repeat the initial doses.

Working safely

- Read the safety data sheet for each product before use. Wear splash goggles, suitable chemical-resistant gloves, protective clothing and closed footwear. When mixing acid, also wear a face shield and a chemical-resistant apron.
- Work with good ventilation and prevent splashes and mist. Provide adequate extraction when using air agitation. A dust mask does not protect against gases and vapours; any respiratory protection must suit the chemicals and working conditions.
- Keep children, pets, food and drinks away from the work area. Use stable secondary containment, label all containers and close tanks and bottles when not in use.
- Keep electrical connections dry. Switch off the power supply before moving connections or components. Never leave an operating bath unattended.

If exposure occurs

Eye contact: immediately rinse with plenty of running water for at least 15 minutes and seek urgent medical attention. Remove contact lenses if easy to do. Skin contact: remove contaminated clothing, immediately rinse thoroughly with water and seek medical attention after acid exposure or if symptoms occur. Follow the safety data sheet.

Storage and disposal

Store brighteners in their closed, labelled containers at room temperature, away from direct sunlight and heat. Take used electrolyte, rinsing water and contaminated filters to a waste service that accepts this chemical waste. Do not discharge them into drains or onto the ground.

Questions or assistance?

Contact **info@verzinkshop.nl** or WhatsApp **+31 6 28090022**. Safety data sheets are available on the product page or on request.