TECHNICAL DATA SHEET (TDS) AND INSTRUCTIONS FOR USE

METOX H-3000

Acid-Free Stainless Steel Passivation Liquid

Hydrogen peroxide-based passivation liquid for spray application

Product Description

METOX H-3000 is a hydrogen peroxide-based stainless steel passivation liquid for spray application that contains no nitric acid or citric acid. It removes free iron from the surface and accelerates passivation, enabling the protective chromium oxide layer of stainless steel to re-form.

It gives a reliable general passivation result on stainless steel surfaces across a wide range of industrial passivation applications.

Features and Benefits

- **Passive layer renewal:** Re-forms the passive layer damaged by grinding, brushing, blasting or in service.
- **Superior result after pickling:** Applied wet-on-wet, it reduces the risk of brown staining caused by free iron (smut).
- **Nitrous gas reduction:** Reduces the formation of toxic nitrous gases (NOx) during rinsing after pickling.
- **Prevention of water stains:** Prevents staining caused by poor-quality rinse water.
- **Safe and environmentally friendly:** Contains no nitric acid, rinse water is neutral; not classified as dangerous goods for transport.



30 kg drum and 1,000 kg IBC

Packaging

Metox H-3000 is supplied in 30 kg drums and 1,000 kg IBC polyethylene containers. Availability of package sizes may vary between markets.

Storage

- Metox H-3000 should be stored indoors in its original packaging at 5–35 °C. When not in use, containers must be kept tightly closed, upright and out of reach of unauthorised persons.
- Metals, alkalis, organic substances, heat and UV light decompose the product; heat and sunlight may increase the pressure in the container. Avoid contact with textiles.

Areas of Use

- Stainless steel surfaces after spray pickling
- Mechanically treated surfaces (grinding, brushing, blasting, etc.)
- Removal of free iron (smut) and brown stains
- Reduction of nitrous gas formation during pickling

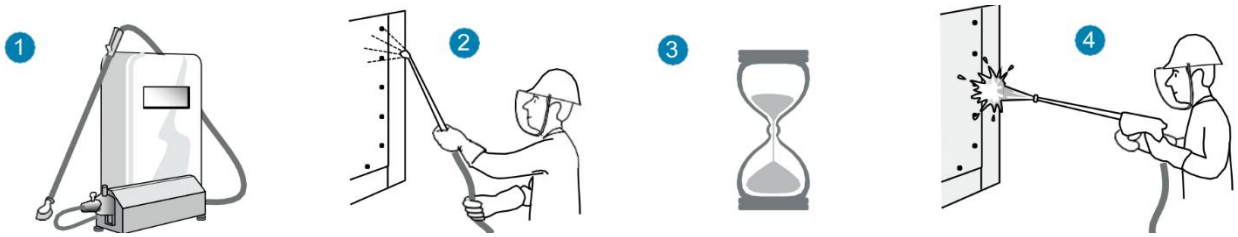
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Technical Properties

Property	Value
Product type	Acid-free passivation liquid (spray)
Active substance	Based on hydrogen peroxide
Appearance	Liquid, colourless
Odour	Pungent
Relative density (20 °C)	≈ 1.0 g/cm³
pH (20 °C)	6.5
Flash point	Not applicable
Solubility in water	Fully miscible
Reaction time	≈ 30 seconds after pickling; 3 – 5 minutes after mechanical treatment
Storage temperature	5 – 35 °C

Instructions for Use

Metox H-3000 is intended for spray application and is applied with an acid-resistant spray pump. Metox P-3000 is recommended for immersion applications.



1. Apply Metox H-3000 with an acid-resistant spray pump.
2. After pickling, spray evenly “wet-on-wet” while the surface is still wet, before rinsing. After mechanical treatment, first clean the surface and rinse with water.
3. The reaction time is about 30 seconds after pickling and 3–5 minutes after mechanical treatment.
4. Rinse the surface with plenty of water. Use deionised water for the final rinse to obtain a residue-free surface.

Occupational safety: Wear protective work clothing, neoprene gloves and tight-fitting safety goggles during application; use suitable respiratory protection if necessary. For details refer to the current Safety Data Sheet.

Waste Treatment

- As Metox H-3000 contains no nitric acid, the rinse water is close to neutral. The product and waste must not be discharged undiluted into drains and must be disposed of in accordance with local regulations.
- Empty containers (HDPE) should be cleaned and can then be recycled in accordance with local regulations.

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