



KEMPHOS TECH

Ecological no-rinse passivating for phosphating cycles

FEATURES

KEMPHOS TECH is a chromium free passivant, indicated for crystalline and amorphous phosphatation cycles.

The product is used in the final phase of the pre-treatment painting cycles of steel, zinc plated steel, aluminum and alloys in order to increase the corrosion resistance and adhesion properties of the paint to the substrates.

KEMPHOS TECH is a formulation that does not present any particular risks to users, only the use of protective goggles is recommended when handling the pure product.

The product is active at low concentrations, it is applied at room temperature and the treatment times are limited to a few seconds, as a result of the highest qualitative yield in the face of an economic process.

CHEMICAL/PHYSICAL DATA

Aspect: liquid limpid or slightly turbid.

pH: 1,6-2,2 (as it is).

Density: 1,000 ± 0,025.

HOW TO USE

KEMPHOS TECH. is used in demineralised water solution (max. $\mu 25$ S / cm) and rinsing before the treatment must not have a conductivity greater than $\mu 50$ S / cm.

Recommended Parameters for Bath Operations:

Concentration: 2÷8 gr/l.

Temperature: room

Contact time: 10÷60 sec.
pH: 4,0÷5,5.
Pression: 0,5÷1 bar.
Conducibility: 40÷120 μ S/cm.

If you need a pH correction contact our technical service.

Bathing checks are carried out by checking and maintaining the correct pH and conductivity values.

NB: significant pollution of the baths and strong variations in pH or conductivity of osmotized water can greatly compromise the effectiveness of passivating action.

Light differences in visual aspect of the product doesn't compromise its effectiveness.

The tanks must be in stainless steel or coated with anti-acid plastic materials (PVC, PE, PP).



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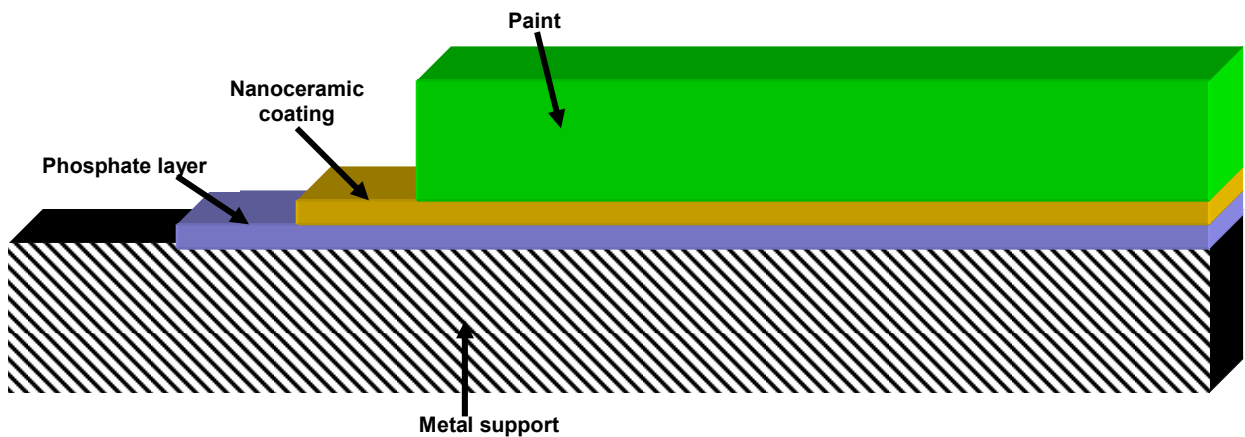
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The use of **KEMPHOS TECH** in the queue for amorphous phosphatation treatment allows to significantly increase the technological value of its paint cycle.

How does **KEMPHOS TECH** work?

KEMPHOS TECH solutions produce a nanoceramic coating on the surfaces. This coating gives two important properties:

- It greatly improves the corrosion resistance of varnished surfaces.
- Increase the adhesion of the paints to the metal support.



Performance of the phosphatization treatment accompanied by a nanoceramic coating application with **KEMPHOS TECH**:

- With **KEMPHOS TECH** you can treat various types of substrate such as steel, CRS, galvanized sheet metal (EG and HEG), copper and its alloys, aluminum.
- Adhesion with square test: no detachment (grade GT 0 according to ISO 2409, grade 5B according to ASTM D 3359).
- Over 400 hours in salt mist according to ISO 9227 and ASTM B 117 regulations with cross cutting and tearing. Comparative tests carried out using a single iron phosphate cycle and one where **KEMPHOS TECH** is used to have averaged 30% more time in salt mist for the treatment of the nanoceramic coating.