



INDUSTRIAL COATINGS

CHEMFOS<sup>®</sup>KA (CF-KA)

# LIQUID IRON PHOSPHATE

## PRODUCT DESCRIPTION



## PRODUCT ADVANTAGES

- Completely miscible with water and applied by the common steam gun apparatus or similar equipment.
- Provides an iron phosphate coating weight of 20 to 60 milligrams per square foot.

**CHEMFOS<sup>®</sup> KA** is a liquid iron phosphate concentrate formulated for preparing large iron components for paint. Proper use provides cleaning and phosphate in one operation.

## TECHNICAL PROPERTIES



Composition:	Liquid
Appearance:	Clear to Slightly Opalescent

Odor:	Solvent
Specific Gravity:	1.069
Pounds per Gallon:	8.9

Flash Point:	N/A
Foaming Tendency:	Low
Recommended Diluent:	Water

Behavior in Hard Water:	Good
Rinsability:	Good
Biodegradable Surfactants:	Yes

Recommended Concentration:	1%-2% by volume
Recommended Temperatures:	160 <sup>0</sup> F-212 <sup>0</sup> F (steam)

Viscosity:	10-20 cps
Stability:	Stable
VOC:	None

# CHEMFOS KA

## USE & CONTROL INSTRUCTIONS:

**CHEMFOS® KA** is recommended to be used at a concentration of 1 to 2% by volume. If there is a reduction of 1:1 at the steam gun head, we would suggest a bath concentration of 2 to 4% of **CHEMFOS® KA** by volume.

100 GALLON SOLUTION 2% = 2 GALLONS **CHEMFOS® KA**

### TITRATION PROCEDURE

1. Pipette a 10-mL. sample of the bath into a 125-mL.-glass beaker or flask.
2. Add 4-5 drops of INDICATOR #5 (Phenolphthalein)
3. Titrate with TEST SOLUTION #3 (0.1N Sodium Hydroxide) until the solution changes from the original color to just noticeably pink.

<u>mls. TEST SOLUTION #3</u>	<u>% by volume CHEMFOS® KA</u>
1.0	1.0
1.9	2.0
2.9	3.0
3.8	4.0
4.8	5.0

5. Temperature of 160<sup>0</sup>F to 212<sup>0</sup>F (steam) should be maintained for best results. Residual heat is needed in the cleaning and phosphate applications and also assists in the drying afterwards.

# CHEMFOS KA

- Different reductions and soil conditions will result in the need for varying concentrations of **CHEMFOS® KA**.
- Immediately after treating the part with **CHEMFOS® KA**, a final fresh water rinse should be used prior to painting.
- The addition of 1/4 gallon of **CHEMFOS® KA** for each 100 gallons of the working bath will increase the titration about 0.35 mL.
- The ratio of **CHEMFOS® KA** to steam will be determined by the amount and type of soil present on the metal to be treated. Your PPG representative will work with you to achieve the most suitable concentration.

## EQUIPMENT

Mild steel equipment is satisfactory for use with **CHEMFOS®KA**.

**ALWAYS REMEMBER TO MONITOR THE FOUR VARIABLES:  
TIME, TEMPERATURE, CONCENTRATION AND PRESSURE.**

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## **PRECAUTIONS:**

**CHEMFOS® KA** is a fully biodegradable product, containing phosphates, accelerator and surfactants. It is completely miscible with water at use concentrations. At the recommended concentrations, **CHEMFOS® KA** provides steel with corrosion resistance and excellence paint adhesion.

Consult the most recent Material Safety Data Sheet for health and safety information relative to the safe handling and storage of this material.

Emergency 24 hour Chemtrec number: 800.424.9300