AQUABOND
Chemistry for Tomorrow

Weldphos HPF

Weldphos HPF is a liquid iron phosphate designed for use in high pressure spray applications. Weldphos HPF is formulated as an active corrosion inhibiting paint-bonding phosphate coating that goes on multi-metal substrates. Weldphos HPF comprises of accelerators, detergents, and acid phosphates that clean and produce corrosion resistant coatings.

Features/Benefits

- Improves impact resistance and flexibility of applied paint films.
- Prevents the under-rusting of paints if the paint film is chipped or scored.
- Best suited for high pressure-hot water or steam generator iron phosphatizing applications.
- Cleans and phosphates in one step.
- Superior surfactant system, which cleans faster, resulting in faster coating deposition.
- Operates as low as 48°C (120°F); but can be operated as high as 100°C (212°F), if higher temperature is required to aid cleaning.
- Economical single step system.
- Liquid material for ease of use.

Operating Conditions

Concentration:	1 – 3% b.v. Weldphos HPF
Temperature:	48 – 100°C (120-212°F)
Time:	45 seconds to 2 minutes

Weldphos HPF can be used as a cleaner or iron phosphate in high pressure-hot water or steam generator systems. If used as a cleaner, apply from bottom to top, followed by side to side cleaning.

Equipment

Steel tanks and heating coils are satisfactory. Electric immersion heaters should be stainless steel (preferably 316 SS).

The data and statements contained in this bulletin are based on testing information and are believed to be accurate and reliable. This bulletin is not a Guarantee or Warranty, express or implied regarding the products use. The product is sold on the condition that the purchaser will do their own tests to determine the suitability of the product in a particular application.

READ THE MSDS BEFORE USING THIS PRODUCT

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Analysis of Weldphos HPF – Burette Titration Method

Apparatus: 10 mL Volumetric Pipette, Type A
50 mL Burette, Class A
250 mL Erlenmeyer Flask

Reagents: 1 % (w/v) Phenolphthalein Indicator solution
0.1 N Sodium Hydroxide (NaOH)

Procedure:

1. Pipette a 10 mL sample of Weldphos HPF solution into a 250 mL Erlenmeyer flask.
2. Add 3 – 5 drops of Phenolphthalein Indicator solution.
3. Titrate with 0.1 N NaOH to a pink endpoint.
4. Calculation:

mL of 0.1 N NaOH titrated x 0.24 = % by volume Weldphos HPF

Analysis of Weldphos HPF – Dropping Bottle Method

Apparatus: 10 mL Graduated Cylinder
250 mL Erlenmeyer Flask
125 Dropping Bottle

Reagents: 1 % (w/v) Phenolphthalein Indicator solution
1 N Sodium Hydroxide (NaOH)

Procedure:

1. Measure a 10 mL sample of Weldphos HPF solution with the graduatedcylinder and add to a 250 mL Erlenmeyer flask.
2. Add 3 – 5 drops of Phenolphthalein Indicator solution.
3. Add dropwise 1N Sodium Hydroxide from a dropping bottle while counting the drops and swirling the solution.
4. Stop adding drops when the solution turns a faint pink colour.
4. Calculation:

mL of 0.1 N NaOH titrated x 0.20 = % by volume Weldphos HPF

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