Product Bulletin

Product Name: Phos & Clean LF-44
Product Code: 2201936
Revision Date: March 19, 2024

Phos & Clean LF-44

Low Foam Steam & Clean Phosphate

LF-44 is a metal cleaner and iron phosphate treatment for use in steam cleaners, pressure wash-wand units, and spray systems. Low Foam for use in recirculating systems where foam can be troublesome. Excellent Grease, Oil And Soil Removal.

LF-44 provides paint and coating preparation which bonds and enhances corrosion resistance of large hard to finish products. For Use On All Metals Of Steel, Zinc, Galvanize And Aluminum

LF-44 meets all specifications requiring a cleaner/iron phosphate treatment. Coating weights of 40-75 mg/ft. Meets The Requirements Of: SPEC AMS-2480-F., MIL Spec TTC-490 TYPE II

Features & Benefits

- Rapid cleaning and providing an amorphous iron phosphate coating.
- Easily removes difficult oils, greases, smut, light rust and films.
- Milder To Employees with No Strong Odors.
- Liquid which is easily mixed into feeders and mixing valves.
- Provides superior corrosion resistance and bonding of paints.
- Attacks difficult smut and surface residues.
- Can be used on steel, aluminum and zinc galvanize.
- Meets requirements of government and automotive specifications.

Physical Data

pH	~ 2.5
Product Type	Liquid
Spec. Gravity	1.09
lbs./gal.	9.09
Foam, 0 = Low, 9 = High	4
Shelf-Life Years	10 years
Freeze Information	Not damaged by freezing

Typical Processing

1. Air “blow-off” unit to be cleaned and phosphate coated. (Surface Dust)
2. Apply LF-44 at:
    a. Steam Wand: 1/2-3% for 30-120 sec., 150-212 deg.F
    b. Spray (Steel) 2-5% for 1-2 minutes, pH 4.5-5.5 @ 115-150 deg.F

   c. Spray (Aluminum) 2-5% for 2-5 minutes, pH 4.0-4.5 @ 115-150 deg.F
   d. Soak: 3-5% for 2-5 minutes, pH 4.5-5.5 @ 115-150 deg.F
3. Apply evenly to the surface. If items are large start at the bottom.
4. (OPTIONAL) Rinse with warm water and dry completely to prevent rusting or oxidation. Note a sealer rinse can be used such as NCS-100.
5. Dry

Use Parameters

Concentration Range	0.5 – 5.0% by volume
Temperature Range	120 – 212 F
Time Range	Dip 1 - 5 minutes
Agitation	As necessary

Control Procedure

Dropper Test: Order Test Kit #100
1) Take A 5 Ml Sample
2) Add 3-5 Drops Of Phenol Indicator
3) Add Drop By Drop Of 1.0 N NaOH, Counting The Drops Until The Color Changes To A Permanent Pink.
4) The # Of Drops X 0.63 = % By Volume

Titration Procedure 9/10
1) Make Sure The Ph Is Within Operating Range
2) Take A 10ml Sample,
3) Add Phenol Indicator
4) Titrate With 0.1n Naoh.
5) The # Of Mls Multiplied By A Factor Of 0.5 = % By Volume.
Target 3-5% Typical

Ph Targets (immersion & Recycle Systems) Target 4.5-5.4
Maintain Ph Below 5.4
**a New Tank Will Have A Lower Ph, Typically 3.5-4.0. Allow Ph To Drift Upwards By Processing Work. Once The High End Range Has Been Achieved Add Lf-44 To Lower Into The Typical Operating Range Of 4.5-5.0

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Waste Disposal

Neutralize pH, remove fats, oils, grease and heavy metals.

Holding Tank Materials of Construction

Acid resistant, stainless or poly.

Other Information

It is important that the OSHA DATA, "Material Safety Data Sheet" be carefully read and reviewed with the users of this product. OSHA data is required to be posted in the work area by law

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For more information on this process,
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