



Achophos 11

Product Code: 2201003
Revised Date: 01/30/2009

Achophos 11

DESCRIPTION

Cleaner and Iron Phosphate for Steel, Aluminum and Zinc

FEATURES AND BENEFITS

- Easy additions with Liquid Concentrate
- Temperature 75° F to 160° F (24-71° C).
- Cleans light soils and phosphates in one step
- Excellent for paint adhesion
- Paint Adhesion promoter

TYPICAL APPLICATIONS

- Pre-Paint and Powder Coat
- Automotive
- Hand Tools
- Metal boxes

Achophos 11 is a liquid acidic cleaner-conditioner for ferrous metals, aluminum alloys, zinc coated steel, zinc die castings, copper, brass alloys and stainless steel alloys.

Achophos 11 has been formulated to remove shop oils, rust, heat scale, weld scale, white rust, flux residues, oxides and tarnishes. **Achophos 11** solutions have also been used for removing buffing compounds from aluminum alloys. For such applications it is suggested that the operating concentration of the **Achophos 11** be maintained between 3 to 6% (volume).



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The **Achophos 11** solution may also serve as a conditioner by converting the metal's surface into a metal-phosphate during the cleaning operation. Ferrous metals, aluminum alloys and zinc surfaces are the metal surfaces that can be converted into a metal-phosphate, which serves as a paint base.

Another important feature of **Achophos 11** is that it is an energy-saver product. Because of its formulation, this product can be used to clean metals in temperatures ranging from 75° F to 160° F (24-71° C).

OPERATING CONDITIONS (IMMERSION)

Concentrations:	2 to 40% (volume)
Temperature:	75 to 170° F (24-77° C)
Time:	as required
Equipment:	stainless steel, polypropylene, polyethylene, fiberglass or rubber lined tanks.
Heaters:	stainless steel or nickel plated steel piping.

HAND WIPING APPLICATION

1. Wipe surface with 1 to 3% (volume) solution of **Achophos 11** at room temperature.
2. Let dry for 1 to 2 minutes.
3. Wipe with cloth.

For hand applications operator **must wear rubber or vinyl gloves, goggles, and protective clothing.**

Achophos 11 meets federal and military specifications TT-C-490 B, method VI and Mil-C-4687, type 11.

CONTROL PROCEDURE

Titration Method

1. Pipette a 10 ml sample of **Achophos 11** solution into a 250 ml Erlenmeyer flask and dilute with 50 ml of water.



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2. Add 3 to 5 drops of phenolphthalein.
3. Titrate to pink end point with 1.0 N sodium hydroxide solution.
4. Record mls 1.0 N sodium hydroxide use.

% (VOLUME) Achophos 11 = 0.61 X MLS 1.0 N SODIUM HYDROXIDE USED.

Test kit control procedure

Use 1/2 ml sample and fill bottle 1/4 full of water, 2 to 3 drops of indicator. Add N-72 solution dropwise until solution turns yellow.

% (VOLUME) Achophos 11 = 0.85 X DROPS N-72 SOLUTION.

WASTE DISPOSAL

Neutralize solutions of **Achophos 11** to a pH between 6 to 8 with caustic soda or soda ash before discarding. In order to be completely informed on the latest waste disposal regulations for your area, please contact the local authorities.

CAUTION

Achophos 11 is a mildly acidic product. Wear protective clothing, gloves and goggles when handling this product. Flush exposed areas immediately with clean cold water. For eyes, flush repeatedly with water and call a physician.

WARRANTY

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.