

PAVCO

GLOBALLY DIRECTED

Phosphates

PavPhos CA710

PavPhos CA710 produces an extremely fine, light microcrystalline zinc phosphate. ***PavPhos CA710*** deposits 200 - 600 milligrams per square foot of crystalline zinc phosphate for applications such as rustproofing under paint or on internal areas of plated parts.

PavPhos CA710

Phosphates



Pavco Inc.
1935 John Crosland Jr. Dr.
Charlotte, NC 28208
www.pavco.com

Phone 704-496-6800

Fax 704-496-6810

Toll Free 800-321-7735

Operating Parameters

	<u>Range</u>
<i>PavPhos CA710</i>	3 - 4% by volume
Temperature	160° - 212°F (71° - 100°C)
Dip Time	1/2 - 10 minutes
Coating Weight Range	200 - 600 mg/ft ²
Operating Analysis Range	Total Acid = 25 - 60 points Iron = Not to exceed 3.5 g/l at 30 points total acid 1% of <i>PavPhos CA710</i> = 8 points total acid

Equipment

Tank:	304 or 316 extra low carbon stainless steel is preferred.
Agitation:	Mild solution flow is beneficial in rack applications Do not disturb the sludge layer
Temperature Control:	Gas or steam heat. Temperature should be controlled within 5°F
Ventilation:	Recommended

Maintenance of the Solution

The solution should be analyzed every 4 to 8 hours depending on work load.

Bath Makeup per 1000 gallons (3785 l)

1. Fill the a stainless steel tank with 800 gallons (3000 liters) of water.
2. Add 40 gallons of ***PavPhos CA710***.
3. Add warm water to the 1000 gallon (3785 l) level, mix well, and heat the bath to operating temperature.
4. Run a load of scrap work to season the bath.

Analysis of PavPhos CA710

The bath is controlled by titrating for iron and total acid, as well as checking the temperature. The rate of reaction is determined by time, temperature, and concentration.

Iron Analysis

Reagents

1. 0.2N Potassium permanganate (KMNO₄)
2. 50% sulfuric acid (H₂SO₄)/50% phosphoric acid

Procedure

1. Pipette a 10 ml sample of the phosphate solution into a Erlenmeyer flask.
2. Add 10 - 15 drops of sulfuric/phosphoric mix.
3. Titrate the sample with 0.2N potassium permanganate from a clear to pink endpoint

Calculation:

mls of permanganate = points of iron

Total Acid Analysis

Reagents

1. 0.1N Sodium hydroxide (NaOH)
2. Phenolphthalein Indicator

Procedure

1. Pipette a 10 ml sample of the phosphate solution into a Erlenmeyer flask.
2. Add 10 drops of phenolphthalein.
3. Titrate the sample with 0.1N sodium hydroxide to a pink endpoint.

Calculation:

mls of 0.1N NaOH = Total Acid Points

Waste Treatment

Dispose of the concentrates or solutions thereof according to local waste treatment regulations.

Safety

Handling– Pavco mandates that the following safety equipment be used when handling chemicals in an electroplating environment: safety glasses, face shield, plastic or rubber apron, rubber gloves and safety shoes. Chemicals should only be handled by trained and experienced personnel.

Storage– Store Pavco products in a clean, well ventilated room which temperature remains above 45°F (7°C). Pavco products should remain in their original container with the lid or cap tightened. Drum pumps or pails must be clean prior to dispensing Pavco products to prevent contamination. If **PavPhos CA710** freezes during shipment or storage, warm the product and mix it well before use.

Emergency Procedures– Refer to the MSDS for detailed emergency procedures

Eye Contact– Seek immediate medical attention. Flush the eyes with water for 15 minutes.

Skin Contact– Remove all contaminated clothing. Wash the skin with soap and water. Seek medical attention

Inhalation– Remove the person to an area with fresh air. Seek medical attention if necessary

Ingestion– Seek immediate medical attention

Spill– Dike the area to contain the spill. Refer to the MSDS for clean-up. Notify the proper authorities if required.

***Note: Refer to the MSDS for detailed emergency procedures**

Product Description & Shipping

PavPhos CA710 (PH900): is a clear liquid with a specific gravity between 1.5 and 1.7 with a pH less than 2.5.

Revision Date: 12/11/08

Revision Number: 2

WARRANTY AND DISCLAIMER

Technical information and recommendations contained herein are believed to be reliable, however, the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement in writing by the seller and manufacturer. **NO WARRANTY OR MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.** The following warranty is made in lieu of any other warranties, express, implied, or statutory. Products are warranted to be free from defects on material and workmanship at the time sold. The sole obligation of the seller and manufacturer under this warranty shall be to replace any product defective at the time sold. Under no circumstances shall the manufacturer or seller be liable for any loss, damage, expense, direct or consequential, arising out of the use of or inability to use the product. Materials shall not be returned to the seller or manufacturer without express written permission. No information or suggestions given by us shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.



PavPhos CA710

Phosphates