COLUMBIA® CHEMICAL
Your Global Plating Partner

1000 Western Drive
Brunswick, OH 44212
PHONE: 330/225-3200
FAX: 330/225-1499
www.columbiachemical.com

# COLPHOS FE 40

DUAL PURPOSE IRON PHOSPATE
TECHNICAL DATA
10-29-18

## COLPHOS FE 40

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|---|---|
| COLPHOS FE 40 | is a dual-purpose liquid compound for simultaneously cleaning and phosphating ferrous metals prior to painting |
| COLPHOS FE 40 | cleans and conditions non-ferrous metals, such as aluminum, prior to painting |
| COLPHOS FE 40 | produces a coating weight in the range of 40-60 mg./sq.ft. |
| COLPHOS FE 40 | is used in single or multiple stage spray washers or dip tanks |
| COLPHOS FE 40 | produces a fine iridescent, tightly adherent, complex phosphate coating, thereby assuring excellent paint adhesion |
| COLPHOS FE 40 | is a water-white liquid compound |

## *OPERATING INSTRUCTIONS*

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| Concentration: | 1-5% by volume |
| Replenishment: | Based on drag out |
| Temperature: | 140°-170° F |
| Equipment: | Mild steel equipment satisfactory<br>If spraying, use v-jet type spray nozzles |
| Spray time: | 30 seconds to 2 minutes, Dip times can be longer |

Specific cleaning and final rinse recommendations will be made by your Columbia Chemical Technical Account Manager.

## *TYPICAL PROCESS CYCLES*

**2 Stage**

1. COLPHOS FE 40
2. Spray Rinse

**3 Stage**

1. COLPHOSE FE 40
2. Spray Rinse
3. Seal

**5 Stage**

1. Alkaline Spray Cleaner
2. Spray Rinse
3. COLPHOS FE 40
4. Spray rinse
5. Seal

## *ANALYTICAL PROCEDURE*

The procedure for the titration is as follows:

1) Pipette a 10 ml sample into a 250 mL Erlenmeyer flask.
2) Add 3-4 drops of phenolphthalein indicator solution.
3) With stirring, titrate with 0.1N sodium hydroxide solution until the solution is a bold pink color.

Calculation = (mL 0.1N sodium hydroxide solution titrated) 0.48 = % COLPHOS Fe 40

## *HANDLING & STORAGE*

COLPHOS FE 40 may cause skin or eye irritation. Proper care should be taken when handling this product. Protective clothing and eye shields or goggles should be worn when handling.

FREEZABILITY: As with most chemical products, it is preferable that freezing be avoided. However, if freezing should occur during transportation or storage, simply allow the container to thaw. Thoroughly mix to bring back to original condition.

## *NON-WARRANTY*

The data in this bulletin is believed by Columbia Chemical Corp. to be accurate, true, and complete. Since, however final methods of use of this product are in the hands of the customer and beyond our control, we cannot guarantee that the customer will obtain the results described in this bulletin, nor can we assure any responsibility of the use of this product by the customer in any process which may infringe the patents of third parties.