

## **E-Phos™**

### **Phosphate Finishes**

### **Iron, Zinc, Manganese**

#### **IRON PHOSPHATES**

They produce a tenacious bond for paint and they retard underpaint corrosion.

##### **E-Phos 600**

**Multi-Metal Cleaner** and **Iron Phosphatizer** for steel by spray 0.5 – 2.0% by volume and immersion 2 to 4% by volume in water at 70° to 160°F. Coating weight 25 to 75 mg/sq.ft. meets requirements of TT-C-490 type II, Mil-C-490A grade III, and Mil-C-46487 grade II.

#### **MANGANESE PHOSPHATE**

##### **E-Phos 630**

Produces a **manganese phosphate** coating at 1,500<sup>+</sup> mg/sq.ft. on steel and iron. The sacrificial finish has excellent break-in properties and reduces wear on moving surfaces. It prevents scoring and galling on moving parts. The absorptive coating retains oils, rust preventives and lubricants. Meets Mil-P-16232. Liquid concentrate used at a 10% by volume in water at 200° to 210°F.

#### **ZINC PHOSPHATES**

They provide a higher degree of corrosion resistance and better receptivity of paints and oils.

##### **E-Phos 660**

**Microcrystalline zinc phosphate** by immersion or spray. A calcium modified formulation which produces a fine-grained crystalline coating on **iron** and **steel**. Coating weight of 600 mg/sq.ft. It remains fine grained regardless of the cleaning method used prior to application. It is an excellent paint base and the fine-grained, low-porosity coating reduces paint consumption. Parts have some “bare” rust protection, so they do not have to be painted immediately. Liquid concentrate used at 4 to 6% by volume in water at 130° to 180°F meets Mil-P-16232.

## **E-Phos 661**

**No Nickel/Low temperature zinc phosphate** for iron and steel with a heavy coating weight of 2,000+ mg/sq.ft. Extended bath life 3-5 times longer than traditional heavy zinc phosphates. Less iron sludge build up on heating coils. Meets Mil-P 16232G Type Z. Liquid concentrate used at 5% by volume in water at 140° to 180°F

## **BLACK PHOSPHATES**

### **E-Prep B-3**

**E-Prep-B3** is a black pre-dip prior to zinc phosphating steel with **E-Phos 661**. Used in combination with Hydrochloric Acid to impart a black finish on the steel. **E-Prep B-3** provides a rich black color treatment on steel when applied prior to a zinc phosphate coating treatment.

### **E-Phos NCr Seal-Z**

**Non-Chromated Zirconium Base Final Rinse for E-Phos Iron and Zinc Phosphate Processes & Aluminum Passivation.** No chromate eliminates costly disposal problems. **E-Phos NCr Seal-Z** improves the adhesion of subsequently applied paint by removing residue from the phosphate finishes and the corrosion resistance of **E-Phos** iron and zinc phosphates under the subsequently applied paint plus for aluminum passivation. Complies with MIL SPEC 16232-G, Type Z, Class 4 when used with **E-Phos 661**. Liquid concentrate used at 0.5 to 1.5% by volume in water. Applied by either immersion or spray.

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