



## TECHNICAL DATA

### K-Phos

**K-Phos** was a breakthrough in the field of corrosion protection. Developed to provide a simple method of applying an organic phosphate seal to metal substrates. Additionally, K-Phos is an excellent pretreatment to increase bonding characteristics of the coating. Easily applied, K-Phos offers the protection against rust and corrosion formerly available only through a complex system of tanks and solutions. Used as a pretreatment for coatings or as a standalone coating to protect from rust, substrates coated with K-Phos can be exposed to weather for extended periods before final finishes are applied without losing its protective effectiveness.

K-Phos works chemically to mildly etch the metal and form a film. Combining a phosphate with an organic binder leaves a fine crystalline film on the metal keeping rust from forming.

#### **Chipping and Peeling**

The film provides a greatly improved surface for bonding, one that is like more complex, conventional phosphate treatments. K-Phos significantly improves chipping and peeling resistance of the finished coat.

#### **Easy to Use**

K-Phos is a non-aqueous liquid that is applied at room temperature as supplied to the end-user. One gallon will cover from 1200 to 1800 square feet. K-Phos can be applied to any clean metal substrate surface by dipping, roll-coating or spraying. For a continuous uniform coating, spraying is recommended. Virtually any type of spray equipment that provides a fine atomization can be used.

Two simple steps are involved in the application of K-Phos:

**First**, the surface to be treated is thoroughly cleaned/degreased. Machined surfaces need only to be solvent cleaned to remove all traces of oil, grease or similar contaminants. Surfaces with scale, rust, or corrosion should be solvent cleaned and sandblasted to expose the bare, bright metal.

**Second**, K-Phos is applied and allowed to stand 10 to 15 minutes or until dry to the touch. After drying the final finish can be applied or the substrate can be stored until ready for final finish application.

In some instances, there may be no need for surface preparation other than degreasing and applying K-Phos. However, sandblasting and solvent cleaning improves and provides insurance for obtaining excellent results.

#### **Tests**

Tests have demonstrated products treated with K-Phos and then damaged sufficiently to expose bare, bright metal, show no incipient rust creep, as is the case with non-phosphated surfaces. Any rust or corrosion that develops is restricted to the exposed bare metal area. The adjacent finished surfaces are not affected and there is no lifting of the finish to expose additional areas to the destructive effects of rust and corrosion.

**Uses**

K-Phos can be used as a protective pre-finish treatment. Manufacturers find it the perfect solution to rust and corrosion problems on all types of machinery and farm equipment, tools, nuts and bolts, metal office furniture, fluorescent light fixtures, iron railings, wrought iron furniture and fixtures, air conditioning equipment, trailers, electrical switch boxes, water heaters, lawn mowers, bicycle frames, etc. It is ideally suited as a pretreatment/primer coating when processing large structures, radio towers, and storage tanks in the field. Large petrochemical items can be sand blasted to white metal and immediately treated and sealed with K-Phos before any rust can develop. Because of the ease of application, painters and metal finishers, mechanics and machinists, farmers and homeowners can use K-Phos wherever protection from corrosion is required.

**Meets Government Requirements**

K-Phos meets the requirements of specifications Mil-C-490A and TT-C-490 applicable to phosphate coatings.