

## **T.C. 714**

### **Rust Remover & Rust Inhibitor**

#### **PRIMARY APPLICATION**

T.C. 714 is a mildly alkaline, powder-form material designed to remove rust as well as shop and fabricating soils, while protecting against re-rusting with a complex conversion coating that serves as a good base for many paints and rust preventive oils and waxes. Designed for tank application to ferrous metals. T.C. 714 is ideal for renovating salvaged parts and certain rejects. While effective in removing rust and soils, T.C. 714 is not intended to strip paint or heat scale.

#### **CHEMICAL CHARACTERISTICS**

Chemical composition	Phosphates, surfactants, fluorides, And sequestrants
Physical form	As received: white powder As used: Slightly opaque solution
Odor	Bland
Bulk density	8.0 lbs./gal.
Hygroscopic tendency	Slight
Foaming tendency	Moderate at 10 oz./gal. of water
Recommended diluent	Water
Maximum solubility	16 oz./gal. of water at 72° F
Behavior in hard water	Sequesters
Rinsability	Good where applicable
Biodegradable	Yes
Phosphate -free	No
Normal working concentrations	8 to 12 oz./gal. of water
Normal operating temperatures	140° to 180°F
pH at working concentrations	7.0 to 7.5 at 10oz./gal. of water
Effect of working solutions on metals	Rate of metal loss from immersion in T.C. 714, 10 oz./gal. of water, 120° F is as follows: Metal (Alloy) Inches per Year Steel (1010) costs Stainless steel (304) 0.0001 Aluminum (303) 0.0914 Copper 0.0028 Brass 0.0038 Magnesium 0.2387 Galvanized steel 0.0093

## **APPLICATION PROCEDURE**

T.C. 714 is applied in soak tanks at 8 to 12 oz./gallon of water. The rust removing and coating ability of T.C. 714 is directly influenced by time and temperature. For example: At low temperatures, 140° to 160°F for 15 minutes or longer, it will generally remove rust and leave a grayish complex coating on steel. At higher temperatures of 160° to 180°F for 5 to 15 minutes or longer, it will remove rust and leave a light to dark gray coating on steel.

pH of the working solution should be maintained between 7.2 and 7.5 for effective cleaning and de-rusting. Normal upkeep of T.C. 714 should keep the pH within this range. Where work is heavily soiled, it may be advantageous to preclean with T.C. 1617 alkaline detergent prior to treating for rust removal and/or coating with T.C. 714. Solution Control: Sample volume is 25.0 ml using procedure 56; T x 1.66 equals oz./gal.

## **NOTES ON USE**

Mild steel tanks and heating coils are acceptable.

**Safety and Handling Precautions:** T.C. 714 is a mildly alkaline product. Direct content may cause irritation of eyes and prolonged contact may cause irritation of skin. It may be harmful if swallowed. Do not get into eyes. Avoid prolonged skin contact. Wash thoroughly after handling. Do not take internally.

**First Aid:** For eyes: Flush with plenty of water for at least 15 minutes. If eyes are Irritated, seek medical attention. For skin: flush with water. If swallowed, drink plenty of Water. Contact a physician.

## **DISPOSAL**

Dilute and discharge in accordance with state and local regulations. Where required, Phosphates should be precipitated from the solution first.

## **PACKAGING**

Packaged in large, non-returnable drums.

## **SHIPMENT**

T.C. 714 may be shipped by any common carrier. The freight classification is "Cleaning Compound NOIBN, Powder."

## **STORAGE**

Suitable for general indoor storage. Keep drum tightly covered when not in use.