



Better Chemistry. **Better Business.**

**Military Deruster**

Product Code: 2541004  
Revised Date: 03/17/2014

### Military Deruster

**Military Deruster** is a liquid acidic cleaner-conditioner for ferrous metals, aluminum alloys, zinc coated steel, zinc die castings, copper, brass alloys and stainless steel alloys.

**Military Deruster** is formulated to remove shop oils, rust, heat scale, weld scale, white rust, flux residues, oxides and tarnishes.

#### **Military Deruster meets spec # mil-c-10578 d, type ii**

**Military Deruster** solutions also can serve as a conditioner by converting the metal's surface into a metal-phosphate during the cleaning operation. Ferrous metals, aluminum alloys and zinc surfaces are the metal surfaces that can be converted into a metal-phosphate, which serve as a paint base.

Another important feature of the **Military Deruster** is that it is an energy-saver product. Because of its formulation, this product can be used to clean metals in temperatures ranging from 75 f to 160 f (24 to 71 c).

### **OPERATING CONDITIONS (IMMERSION)**

Concentration:	2 to 40% (volume)
Temperatures:	75 to 170 f (24 to 77 c)
Time:	as required
Equipment:	stainless steel, polypropylene, polyethylene, fiberglass or rubber lined tanks.
Heaters:	stainless steel or nickel plated steel piping.

#### *Hand wiping application*

1. Wipe surface with 1 to 3% (vol) solution of **Military Deruster** at room temperature.
2. Let dry for 1 to 2 minutes.
3. Wipe with cloth.

For hand applications, operator must wear rubber or vinyl gloves, goggles, and protective clothing.



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### **CONTROL PROCEDURE**

#### TITRATION METHOD

1. Pipette a 10 ml sample of **Military Deruster** solution into a 250 ml erlenmeyer flask and dilute with 50 ml of water.
2. Add 3 to 5 drops of phenolphthalein.
3. Titrate to pink end point with 1.0 n sodium hydroxide solution.
4. Record mls 1.0 n sodium hydroxide used.

$$\% \text{ (vol) Military Deruster} = 2.38 \times \text{mls 1.0n sodium hydroxide used}$$

### **TEST KIT CONTROL PROCEDURE**

1. Fill sample bottle  $\frac{1}{4}$  full with water.
2. Using the syringe provided, measure 1 ml of solution to be tested and add to sample bottle.
3. Add 5-10 drops of Methyl Orange Indicator.
4. Add N-72 test kit solution drop-wise to sample bottle while mixing, until the solution turns from Red to Yellow. Record number of drops N-72 required.

$$\% \text{ (vol) Military Deruster} = 1.28 \times \text{drops n-72 solution}$$

### **WASTE DISPOSAL**

Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

### **CAUTION**

**Military Deruster** is an acidic product; avoid skin and eye contact. Wear protective clothing, gloves and goggles when handling **Military Deruster** and its made-up solutions. Skin contact:



## Product Bulletin

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flush with water containing 1% (wgt) bicarbonate of soda. In case of injury, contact a doctor immediately. For eyes: irrigate with water for at least 15 minutes.

### **WARRANTY**

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.