Product Bulletin
Product Name: Military Deruster
Product Code: 2541004
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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.

It is Mil-C-10578 D, Type II compliant.

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).

Features & Benefits

Versatile	Multiple uses clean, de-rust, etch; simpler inventory control
High detergency	Clean and deoxidize in one step: higher productivity
Non-chelated	Easier wastewater treatment; lower cost

Operating Conditions

Concentration	2% – 40%
Temperature	75°F – 170°F (24°C – 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% solution of Military Deruster at room temperature.
2. Let dry for 1 to 2 minutes.
3. Wipe with cloth.

For hand applications, operator(s) must wear proper PPE (rubber or vinyl gloves, goggles, and protective clothing).

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 indicator.
3. Titrate to pink end point with 1.0 N Sodium Hydroxide solution.
4. Record mL used.

Calculation

Concentration = 2.38 x mL 1.0 N NaOH x 2.38

Test Kit Method

1. Fill sample bottle ¼ full of water.
2. Using the syringe provided, measure 1 mL of solution to be tested and add to sample bottle.
3. Add 5 to 10 drops of Methyl Orange indicator.
4. Add 0.72 N Sodium Hydroxide dropwise to sample bottle while mixing, until the solution turns from red to yellow.
5. Record number of drops used.

Calculation

Concentration = # Drops 0.72 N NaOH x 1.28

Waste Disposal

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

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