



# Turco® 3878

## WATER EXTENDABLE EMULSION CLEANER

### Description:

Turco® 3878 is a yellow, opaque liquid, water extendable emulsion precleaner formulated for immersion type production cleaning of petroleum residues, corrosion preventative, cutting oils, shop oils and mil marking inks from ferrous, stainless steel, copper, brass and aluminum alloys.

### Benefits:

Turco® 3878 offers these benefits:

1. Non-flammable in concentrate and diluted form
2. Readily mixes with tap water at recommended concentrations
3. Low foaming at recommended concentrations and temperatures
4. Readily rinses from parts with cold water
5. Operates from room temperature to 71°C (160°F).
6. Suitable for use in ultrasonic systems.

### Use instructions:

**TANKS:** tanks and associated equipment may be fabricated from mild steel or stainless steel.

**MIXING:** Add Turco® 3878 to tap water at the ratio of 4-20% by volume of water for immersion and ultrasonic cleaning. Operate tank from 54 to 71°C (130-160°F). Optimum temperature has been found to be between 54 and 60°C (130-140°F). Use moderate air or mechanical agitation. Mechanical agitation is preferred.

**RINSING:** Rinse parts with cold, tap water by spray or immersion methods.

### CONTROL:

Laboratory control method is as follows:

1. Obtain a sample of Turco® 3878 / water solution from tank and allow to cool to room temperature.
2. Pipette a 100 ml sample into a beaker and add 25 ml of 25% (volume) sulphuric acid.

3. Add 3-5 droplets of Ferroin Indicator.<sup>1</sup>
4. Titrate with 0.1N Ferrous ammonium sulphate to a red end point. Color changes from yellow-green to red.
5. Record ml of Titrate required.
6. Calculations: ml of Ferrous Ammonium sulphate x 1.04 = volume percent of Turco 3878 in solution.

### **Disposal information:**

Dispose of spent solution per local, state and regional regulations. Refer to your local TURCO territory manager; district sales office or MSDS for additional disposal information.

### **Caution:**

Turco® 3878 contains a small percentage of chromate. Avoid contact with eyes, skin and clothing. Do not take internally. Use with adequate (equivalent to outdoor) ventilation.

Protective clothing, such as a chemical face shield or goggles, apron and boots and gloves, made from solvent resistant neoprene should be worn when using and handling this product. A respirator equipped with a mist cartridge, should be worn during mist conditions.

Store and transport in closed container.

Refer to container label or MSDS for additional precautionary, handling and first aid information.

### **NOTICE:**

*The above information and recommendations concerning this product are based upon our laboratory tests and field use experience. However, since conditions of actual use are beyond our control, any recommendations or suggestions are made without warranty, express or implied. Manufacturer's and seller's sole obligation shall be to replace that portion of the product shown to be defective. Neither shall be liable for any loss, damage, or injury, direct or consequential, arising out of the use of this product.*

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<sup>1</sup> Ferroin, (0.025 Molar) can be obtained from your local chemical or lab requisites supplier.