



## PRETREATMENT TECHNICAL DATA SHEET

## IMMERSION/SOAK CLEANER

## PRODUCT DESCRIPTION

**ULTRAX 93D** is a liquid alkaline multi-metal cleaner designed to remove mill oils, drawing and stamping oils, synthetic lubricants and rust preventatives from ferrous and non-ferrous substrates.

*ULTRAX* cleaners are recommended for use in any production process requiring the pretreatment and painting of metal components, for end-products such as automobile parts, appliances, lawn & garden, heavy duty equipment, tractors, recreational vehicles or office furniture.

## TECHNICAL PROPERTIES

- |                               |  |
|-------------------------------|--|
| • Composition:                | Liquid                                 |
| • Recommended Concentrations: | 3-5% by volume                         |
| • Temperature:                | 120 <sup>0</sup> - 150 <sup>0</sup> F. |
| • Dwell Time:                 | 2-5 minutes                            |

## PRODUCT ADVANTAGES

- Capable of removing a wide variety of soils, e.g., lubricants, rust inhibitors, metalworking compounds (oil and synthetic based).
- Mixes readily with water and is suitable for use with alkaline resistant feed equipment
- Contains sodium nitrite to reduce flash rusting
- Heavy soil loading capacity, fewer bath dumps
- Safe on steel, galvanized steel, EZG and aluminum

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### USE & CONTROL INSTRUCTIONS:

#### Operating Properties (Typical):

- Application: Immersion
- Operating Concentration: 3-5% by volume
- Operating temperature: 120<sup>0</sup>-150<sup>0</sup>F
- Operating time: 2-5 minutes

Specific process conditions may warrant operating the above parameters outside of the typical ranges. Please consult your PPG representative.

#### **Charge Details:**

- 1) Fill the clean tank to approximately  $\frac{3}{4}$  full of the operating solution with fresh water.
- 2) Heat the tank to 100<sup>0</sup>F.
- 3) Slowly add the recommended amount of **ULTRAX 93D** to the processing tank.
- 4) Continue to heat the processing tank to the recommended operating temperature.
- 5) Mix well and continue filling the tank to the operating level with fresh water.
- 6) Make concentration adjustments and begin processing parts.

#### Analysis Procedures:

CAUTION: DO NOT PIPETTE BY MOUTH!

#### Free Alkalinity

##### **Equipment needed:**

- Burette
- Beakers
- 250 mL Flask
- 10 ml volumetric pipette
- Pipette Bulb

##### **Reagents needed:**

- Indicator: Phenolphthalein
- Titrant: 0.1 Normal Sulfuric Acid

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### Procedure:

1. Pipette 10 ml of cleaner bath into a clean, dry 250 mL flask.
2. Add 5 drops of Phenolphthalein indicator.
3. While swirling the flask, titrate the pink/red solution with 0.1 Normal Sulfuric Acid until the solution turns colorless.

### Calculation:

mL of 0.1 N Sulfuric Acid X 0.67 = Percent concentration of **ULTRAX 93D**

Concentration % by volume	Free Alkalinity (mL)
1.0	1.5
2.0	3.0
3.0	4.5
4.0	6.0
5.0	7.5
6.0	9.0

### ULTRAX 93D Replenishment:

- To raise the concentration by 1% by volume, add 10 gallons of **ULTRAX 93D** to each 1000 gallons of tank volume.
- To raise the concentration by one point of free alkalinity, add 6.7 gallons of **ULTRAX 93D** for each 1000 gallons of tank volume.

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#### TECHNICAL DATA SHEET DISCLAIMER—INDUSTRIAL COATINGS:

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