



INDUSTRIAL COATINGS

UGLTP

ULTRAGUARD LTP

PRETREATMENT TECHNICAL DATA SHEET

IRON PHOSPHATE CLEANER COATER / CONVERSION COATING

PRODUCT DESCRIPTION

ULTRAGUARD LTP is a single package detergent iron phosphate intended for three-stage spray washer applications. Generally, coatings in the 30 - 60 mg/ft² ranges can be anticipated on cold rolled steel. The coating is generally a deep blue; however it may take on gold to gray-gold appearance at higher coating weights or on hot rolled steel.

TECHNICAL PROPERTIES

Composition:	Liquid
Appearance:	Clear to Light Amber
Recommended Concentrations:	5% by volume
Recommended Temperatures:	120 ^o F-140 ^o F
pH (concentrate):	2.2-2.7
pH (working solution):	4.0-5.0 @ 5%

PRODUCT ADVANTAGES

- Provides excellent cleaning
- Low to moderate temperature operation
- pH stable
- Ease of operation
- Compatible with liquid and powder paints
- Compatible with anodic electrocoats

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USE & CONTROL INSTRUCTIONS:

- Fill tank $\frac{3}{4}$ full with fresh water.
- For each 100 gallons of working volume add 5 gallons of **ULTRAGUARD LTP** and 9/10 gallon of Chemfil Buffer.
- Turn on circulation pump; fill tank to operating level and heat to operating range of 120⁰ – 140⁰F.

Total Acid

- Using a 10 ml sample, pipette transfer 10 ml of the operating bath to a clean, dry beaker.
- Add 4-5 drops of phenolphthalein indicator (N-10) and titrate with 0.1 NaOH (T-1) until the solution changes from colorless to pink.
- The number of ml of T-1 required is the Total Acid (TA) in points of **ULTRAGUARD LTP** bath.
- The TA level is best controlled by the continuous addition of **ULTRAGUARD LTP** concentrate using a metering pump rather than by infrequent additions of large amounts of chemical.
- A normal **ULTRAGUARD LTP** bath will operate in a TA range of 6 – 10 points.

% Concentration (by Volume)

1
2
3
4
5
6

MLS Titrated (T-1)

2.0
3.8
5.6
7.3
9.1
11.0

pH CONTROL is normally maintained at 4.0 to 5.0.

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If adjustments are needed follow instructions below:

pH Control - By meter

1. The pH of the operating solution should be checked with either an electronic pH meter, preferably one with temperature compensation.
2. Maintain the pH in the range of 4.0 – 5.0 for optimum quality.
3. pH adjustments can be made in the following manner:
 - a) To raise the pH approximately 0.1 units, add 200 ml of CHEMFIL BUFFER per 100 gallons of operating solution.
 - b) To lower the pH approximately 0.1 units, add 100 ml of pH CONTROLLER solution per 100 gallons of operating solution.

TOTAL ACID

TITRATION:

SAMPLE SIZE:

INDICATOR:

TITRANT:

COLOR CHANGE:

FACTOR:

BURETTE

10 ml

Phenolphthalein

0.1N Sodium Hydroxide

Colorless to pink

%(v) =Sodium Hydroxide x 0.55

TECHNICAL DATA SHEET DISCLAIMER—INDUSTRIAL COATINGS:

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