



Better Chemistry. **Better Business.**

Emerald Seal 308

Product Code: 2204009
Revised Date: 5/23/2014

Emerald Seal 308 (Final Rinse/Seal)

DESCRIPTION

Emerald Seal 308 is an acidic, non-chromated final seal treatment for pretreatment systems prior to painting. The product's concentrated liquid form allows quick bath make-up and adjustments to minimize maintenance time. This product is designed to produce a corrosion resistant, adhesion promoting metal surface profile, which will enhance the bonding of most organic finishes to the treated parts. Comparative testing has shown that the underfilm corrosion and organic delamination is reduced compared to fresh or D.I. water final rinsing.

Emerald Seal 308 is a non-chromic acid product and greatly reduces the cost and efforts required for safe disposal in comparison to chromate based materials. For best results the metal surface should be properly prepared such that clean and deoxidized parts are exposed to the **Emerald Seal 308** solution.

FEATURES AND BENEFITS

- Compliments Most Paints
- Low to No Foam
- Effective on All Grades and Types of Metal

TYPICAL PROPERTIES

Appearance	Clear Colorless Liquid
Rinsing	Superior
Solubility	Excellent
Specific Gravity	1.03 – 1.06 (water = 1.0)
pH 5% dilution	3 - 4

USAGE PROCEDURES

For most operations, **Emerald Seal 308** should be used at 0.5 – 1.0% by volume in water with operating pH of 4.8 – 5.0. Use at ambient to 120°F in recirculating spray washers for 30 – 60 seconds exposure. Control by using pH meter, dissolved solids readings and Hubbard-Hall titration procedures.



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TITRATION PROCEDURE

1. Obtain a 50-mL sample.
2. Add approximately 5 drops of Phenolphthalein Indicator to the sample.
3. Add 0.1 N Sodium Hydroxide (0.1 N NaOH) to the sample using a burette. Record the number of ml needed to turn the test solution from clear to light pink.
4. Compare the number of ml to the table below.

ml of 0.1 <u>N</u> NaOH	% Concentration
1.7	0.25
2.6	0.50
3.5	0.75
4.4	1.00
5.3	1.25
6.2	1.50
7.1	1.75
8.1	2.00
9.0	2.25
9.9	2.50
10.8	2.75
11.7	3.00
12.6	3.25
13.5	3.50

Note – The values in the table above are approximations.

TEST KIT PROCEDURE

1. Add 10 mls of **Emerald Seal 308** solution to the flask using a 10 ml syringe.
2. Fill flask ¼ full with water.
3. Add 3-5 drops of phenolphthalein indicator to the flask.
4. Add 0.1 N sodium hydroxide drop-wise to the flask until solution turns from colorless to pink.
5. Record number of drops of 0.1 N sodium hydroxide required to titrate solution.

%Vol Emerald Seal 308 = 0.034 x number of drops of 0.1 N NaOH solution



Product Bulletin

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STORAGE

Emerald Seal 308 should be stored in a cool dry area. Store away from incompatible substances; see an issued MSDS.

PRECAUTIONS:

KEEP OUT OF THE REACH OF CHILDREN. Please refer to the label and MSDS bulletins for all warnings, recommendations for safety equipment and other regulatory information. Always wear all personal protection equipment.

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.