

EQUIPMENT

Tanks	Polypropylene or polyethylene
Heaters	PTFE coated
Ventilation	Recommended

INSTALLATION

It is essential that the tanks to be used for Zincovate Blue HSS are thoroughly cleaned and leached before any product is introduced.

If there is any doubt as to the cleaning procedure please contact Automated Chemical Solutions.

1. Half fill tank with clean water.
2. Add required quantity of Zincovate Blue HSS.
3. Top up to working level and mix well.
4. Heat to operating temperature.
5. Adjust pH.

PROCESS SEQUENCE

1. Zinc plate
2. Cold water rinse
3. Cold water rinse
4. 0.5% v/v nitric acid
5. Rinse
6. Zincovate Blue HSS
7. Cold water rinse
8. Protectall P200 (optional)
6. Dry

MAINTENANCE AND CONTROL

Addition rates can be based on the following:

Barrel: 2 – 2.5 L Blue HSS / 1000 ft²
Rack: 1.5 – 2 L Blue HSS / 1000 ft²

pH should be raised with sodium hydroxide solution (100 g/L) or lowered with nitric acid (1% v/v)

Manufactured for North America exclusively by **FOCUSTECH™**



2810 S. Roosevelt St.
Tempe, AZ 85282
Telephone (602) 268-3500
www.gmfchemicals.us

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NOTES

- Zinc Thickness: To obtain maximum corrosion resistance with Blue HSS, it is recommended that the zinc be plated to a *minimum thickness of 0.3 mils*.
- Maximum Color/
Corrosion Protection: To obtain brightest blue hue and maximum corrosion protection operate bath at 5 – 8%, pH at 2.4 (with papers), elevated temperature (85°F) and dwell of 30-45 secs
- pH: Very low pH (<2.0) makes product more active and can result in yellow streaking.
- Reduced Bath Life: Any components that fall into the passivate solution should be removed immediately. If components are left in solution the bath life will be greatly reduced.

ANALYSIS METHOD

Reagents

20% w/v sodium hydroxide solution
Hydrogen peroxide solution
Conc hydrochloric acid
Ammonium bifluoride
Potassium iodide
0.1N Sodium thiosulfate
Starch indicator

Method

1. Pipette a 10 ml sample into a 500 ml conical flask.
2. Add 100 mls of DI water and 10 mls of 20% sodium hydroxide solution.
3. Slowly add 20 ml hydrogen peroxide.
4. Boil for 30 minutes.
5. Allow to cool.
6. Add 10 ml hydrochloric acid and 3 g ammonium bifluoride.
7. Add 2 g potassium iodide.
8. Titrate with 0.1N sodium thiosulfate to a pale straw color. Add starch indicator and continue titration to a green end point.

Calculation

Zincovate Blue HSS (%) = mls of 0.1N sodium thiosulfate X 0.32

Replenishment

For every 1% required add 10 ml/L Zincovate Blue HSS

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STORAGE

Store in original containers above 40°F

SAFETY

CAUTION! Zincovate Blue HSS concentrates and working solutions contain acidic components. Avoid contact with eyes, skin and clothing. Wear chemical handler's gloves, goggles and protective clothing when handling. Read and understand Material Safety Data Sheet before using this product.

PRODUCT GROUPS

The following products are referred to in this data sheet.

PRODUCT NAME	PRODUCT NUMBER
Zincovate Blue HSS	237012

NOTICE

The information and recommendations of PMD (UK), Ltd. and Automated Chemical Solutions, Inc., and its representatives, regarding this product are, to the best of our knowledge, true and accurate. We make no guarantee of results because the conditions of actual use are beyond our control. We assume no liability for damages or penalties resulting from the use of this product or following our recommendations. Our recommendations and suggestions for use of this product are not intended to grant license to operate under or infringe any patent.

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