Stripol NSN

The Stripol NSN system is composed of two additives: Stripol NSN (liquid concentrate) & Stripol (powdered blend). The immersion stripping bath is prepared by combining both products in ratio with water.

Features & Benefits

Rapid, Efficient	Improves production process
Immersion process	Does not use current
Wide operating parameter range	Improves process efficiencies

Operating Conditions

Recommended application general stripper bath

	Range	Optimum
Stripol	4 – 6 oz/Gal (30 – 45 g/L)	5.4 oz/Gal (40.5 g/L)
Stripol NSN	15 – 25% v/v	20% v/v
Temperature	150°F – 170° F (66°C – 77°C)	160° F (71°C)
Time	See Operating Tips	As required
Agitation	Solution Movement	As required

Note: Do not use baskets racks, or related equipment to be immersed in the bath that have brazed or soldered joints.

Solution Make Up
General Stripper Bath

Caution!! Consult the SDS's and product bulletins for Stripol and Stripol NSN before handling these products. Stripol NSN is corrosive. Wear approved, protective clothing. Confirm that ventilation system is functioning properly.

Be sure the process tank has been drained and cleaned. Fill to within two thirds of final operating volume with clean, warm water (100°F to 120°F, 38°C to 49°C). With good solution mixing, gradually add the required volume of Stripol NSN. Next, add with good mixing, the required weight of Stripol . Mix well until all dissolved. Adjust final solution operating volume and temperature.

Maintenance additions stripping solution

Stripol NSN and Stripol are typically consumed in the immersion stripping processes. Drag out of the stripping bath and replenishment with water also dilutes the working solution. Regular maintenance additions of Stripol NSN and Stripol are recommended to replenish the bath. This can be accomplished by observing the quality of stripping & speed and making appropriate additions per requirements of the process. The following range of maintenance additions is recommended:

Stripol Product	Replenishment Addition
Stripol	7 – 10% v/v
Stripol NSN	2 – 2.75 oz/Gal (15 – 41.2 g/L)

NOTE: Follow the same procedure as initial bath make up. Add Stripol NSN first, followed by Stripol.

Process suggestions

Under typical operating conditions, the bath is maintained with additions of Stripol NSN and Stripol, in the same ratio, as per initial bath make up (see Maintenance Additions Stripping Solution). As the bath ages, the stripping rate at constant operating temperature will decrease, while the soluble nickel concentration increases. Replenishment additions are therefore recommended, to maintain desired rate of stripping the nickel deposit. The actual stripping rate is a function of nickel thickness, strip bath temperature, and maintenance additions of Stripol NSN and Stripol.

Additional process related operation and control tips include:

- The working pH range of the Stripol NSN stripping solution is 10.5 to 11.5. Lower solution pH results in longer stripping times. Higher solution pH may contribute to etching steel and brass base metal. Stripol NSN and Stripol when added, neutralize one another, maintaining the desired bath pH range. Therefore, maintenance additions of both products are important during the bath's service life.

- Heating the bath for prolonged periods above the recommended maximum temperature will hasten the thermal oxidation of the Stripol NSN component.

- Do not use the bath to strip plated coatings off zinc base metals, aluminum alloys, lead, and tin base metals.

- Prepared as recommended and working within the operating range, a new Stripol NSN process solution will strip 0.0002-0.0005 inch (5.1to 12.7 micrometer) thick nickel deposit in 10 to 15 minutes.

- The working strip bath becomes saturated at a concentration of 3 to 4 oz/Gal of dissolved nickel. At this point maintenance additions would be uneconomical. The bath should be replaced with a fresh make up.

- Agitation is recommended to prevent localized depletion of the solution. This helps maintain stripping rate and prevent etching of the base metal.

- Economical use of the stripping bath is achieved by processing parts in a rotating, enclosed barrel.

- Stripped parts develop a light black smut on the surface. This smut, a protective coating which prevents etching of the base metal, is readily removed in the surface preparation cycle, before re-plating.

- Etching of the base metal at recommended operating temperature range, with lack of surface smut, may indicate low reserve concentration of Stripol NSN.

- Slow strip rate at recommended operating temperature range, with formation of surface smut, may indicate low reserve concentration of Stripol.

- Oily and greasy parts should first be soak cleaned in the appropriate Hubbard-Hall cleaner, before immersion in the Stripol NSN stripping solution.

- Topcoat deposits of chromium should first be anodically stripped in the appropriate Hubbard-Hall electro cleaner. Rinse well before transfer to the Stripol NSN process bath.

- Organic coatings, such as lacquers, paints, and powder coatings, should first be stripped in the appropriate Hubbard-Hall stripping solution.

Physical Characteristics - Stripol

Appearance	Straw/ tan colored, clear solution
Odor	Slight ammonia
Solubility	Complete
Foaming Tendency	Low

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Product profile - Stripol

Caustic	No
Phosphate	No
Silicate	No
Complexors (Gluconate type)	No
Chelates (EDTA, NTA types)	No

Product profile - Stripol NSN

Caustic	No
Phosphate	No
Silicate	No
Complexors (Gluconate type)	No
Amines	Yes
Chelates (EDTA, NTA types)	No

Hazard Classification - Stripol

DOT Hazard Class	Not D.O.T. Regulated
DOT Shipping Name	N/A
UN Number	N/A
Packing Group	N/A
Guide Number	N/A

Hazard Classification - Stripol NSN

DOT Hazard Class	Corrosive
DOT Shipping Name	Corrosive Liquid N.O.S.
UN Number	1760

Waste Disposal

The Stripol NSN process working solution is alkaline. Used and spent solutions contain dissolved nickel, and perhaps trace quantities of other metals. If the solution is to be treated, contact your Hubbard-Hall representative for instructions and assistance with the waste treatment process.

Caution

Please read and understand the Stripol NSN and Stripol Safety Data Sheets before handling and using these products.

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.

Our people. Your problem solvers.

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