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A2LA Accredited ISO/IEC 17025:2005 Certificate # 2558.01

STRIP STAR

Strip Star is a nickel stripping powder mixture designed for fast removal of nickel plating from a variety of metal substrates. **Strip Star** is a single component nickel stripper formulation that is easy to use and control.

Strip Star is used to remove electroplated or electroless nickel from steel, copper, copper alloys, zinc diecast, and a variety of other metal substrates.

FEATURES

-Single component easy to use
-No toxic fumes or odors
-Simple immersion process
-Non-electrolytic process, no rectifier required
-Stabilized formulation, longer solution life leads to economy of operation

MAKE-UP FOR SINGLE BATCH OPERATIONS

1. Fill tank half full with water and heat to 120-150˚F.
2. Add 3 to 4 pounds of **Strip Star** powder per gallon of final tank solution.
3. While mixing add water to final tank solution level and heat to 120-150˚F.
4. After thorough mixing check pH; recommended range is 9.2-9.8. Raise pH to operating range with soda ash if necessary.
5. Stripping solution is ready to use.

The above single batch tank method is desirable for “as needed” stripping use in small bath operations. The batch is used to completion without further additions, removing a final total of 2-4 ounces of nickel for each gallon of tank solution.

For **larger scale** nickel stripping operations the initial make-up can be reduced to 1.5-2.0 pounds of **Strip Star** per gallon. Maintain the stripping solution by testing for the nickel concentration and adding 0.6 pounds of **Strip Sta**r per gallon of strip solution for each new ounce per gallon of nickel in the solution. The "new" nickel is the nickel build-up amount between analysis and additions; see the "Test for Nickel" section below.

GENERAL OPERATING GUIDELINES

- Strip chrome plating before nickel stripping if applicable.
- Do not allow parts to touch tank walls or heating coils.
- Heavy loading on racks or in tumbling barrels is the most economical way to process the parts.
- Applying reverse current to the parts can speed up stripping on steel substrates (may etch non-steel substrates). Use 2-6 volts, 10-25 amperes per square foot.
- Preheating parts immediately before parts are placed in the stripping solution will speed up the strip rate.
- Additions of sulfur powder to the stripping solution will inhibit copper contamination and extend the solution life. Use one ounce additions until the solution is saturated, with some sulfur floating on and in the bath. Excess additions will not affect the stripping bath.
- Avoid the use of air agitation to maximize the bath life. Use part movement and/or mechanical mixing.
- Avoid overheating and let solution cool when not in use to maximize bath life.

SMUT REMOVAL AFTER STRIPPING

Nickel oxide and sulfides may remain on stripped parts as a dark smut film. This smut film can be removed by one of the methods listed below.

1. One pound per gallon chromic acid desmut.
2. Cyanide desmut, 2-6 ounce per gallon of sodium cyanide.
3. Reverse current desmut in 2-3 pounds per gallon Strip Star, for steel parts. (An old or new **Strip Star** solution can be use, but bath life will be reduced.)
4. Contact your Accu-Labs Technical Sales Representative for more information about our proprietary smut removal products.

TEST FOR NICKEL IN STRIP SOLUTION

1. Pipet a 10 ml sample into a 250 mL flask.
2. Add 75-100 mL of DI water.
3. Add 10 mL of Ammonium Hydroxide 26˚ Be.
4. Add a pea size amount of murexide indicator powder mixture.
5. Titrate with 0.1 M EDTA solution to a violet to purple end point.

Calculation:

MLS of EDTA x 0.078 = Nickel, ounce per gallon

Add 0.6 pounds of Strip Star powder per gallon of tank solution for each "new" ounce per gallon of nickel

Example: For a 100 gallon tank, the first day test result is 0.4 ounce per gallon of nickel, then add 0.6 x 100 x 0.4 oz/gal nickel = 24 pounds of **Strip Star**. The second day test result is 1.1 ounce per gallon of nickel. The "new" nickel is 1.1-0.4 = 0.7 oz/gal nickel. Then add 0.6 x 100 x 0.7 = 42 pounds of **Strip Star.**

EQUIPMENT

Tanks can be made of steel, polypro, plastic lined steel or other suitable materials with high temperature ratings. Heating coils can be steel or Teflon.

SAFETY

Use eye protection and personal protective gear when handling or working with this product; read MSDS prior to use.

WASTE TREATMENT

Strip Star solutions are alkaline and contain nickel metal which must be treated in accordance with federal, state, and local regulations.

DISCLAIMER