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A2LA Accredited ISO/IEC 17025:2005 Certificate # 2558.01

80 NICKEL STRIP NON-CYANIDE ALKALINE STRIPPING PROCESS

ACCU-LABS 80 NICKEL STRIP is a non-cyanide, alkaline stripping process that was specifically developed to remove nickel plate from steel, copper alloys and copper by immersion process. Depending on the temperature of the stripping solution, a new **ACCU-LABS 80 NICKEL STRIP** solution will strip at the rate of .25 to 1.00 mil of nickel metal per hour. One gallon of **ACCU-LABS 80 NICKEL STRIP** will dissolve approximately 2 to 4 ounces of nickel metal.

OPERATING GUIDELINES

Concentration:	20% by volume of 80ANF 20% by volume of 80BNF
Optimum Stripping Temperature:	175 to 185°F
Dwell Time:	Thickness and temperature dependent.
Makeup of 100 Gallon Bath:	20 gal 80ANF NICKEL STRIP 20 gal 80 BNF NICKELSTRIP Added to 60 gal water

EQUIPMENT: tanks should be constructed of steel or stainless steel. Heating coils should be mild steel or stainless steel. Teflon heating coils may be used.

AGITATION: Mechanical agitation is recommended to avoid local overheating. Agitators should be made of steel or stainless steel or plastisol coated. **DO NOT USE AIR AGITATION.**

ACCU-LABS 80 NICKEL STRIP

The stripping tank should be kept covered at all times to prevent evaporation of one of the components. When not in use, the stripping solution should not be kept hot for any extended length of time. Covers can be made of steel, stainless steel, polyethylene or PVC.

ACCU-LABS 80 NICKEL STRIP solution should be used in a well ventilated area. Exhaust ventilation should be used.

APPLICATION

All grease and organic contamination should be removed prior to stripping. All brass and chromium should be removed prior to stripping. The chromium can be removed by immersion in hydrochloric acid. Both the brass and chromium can also be stripped using a strong reverse alkaline electrocleaner; in which case the parts should then be immersed in a 50% hydrochloric acid solution to activate the nickel, followed by an overflow water rinse before immersion in the **ACCU-LABS 80 NICKEL STRIP** solution.

CAUTION

Do not contaminate the **ACCU-LABS 80 NICKEL STRIP** solution with salts of chromium, copper, lead, cadmium, or the above metals. Metallic and organic contamination will shorten the life of the stripper.

Avoid contact with parts to be stripped with the sides of the tank or any of the heating or temperature control equipment or agitator. The equipment should be insulated to prevent any stray currents from setting up a galvanic cell within the stripping solution.

In the stripping of nickel from copper and its alloys, an inhibiting film will cover the copper parts. This film can be removed either in a dilute sodium cyanide solution or chromic acid solution or in a solution of 977 Accu-labs, which is neither chromated or contains cyanide.

ACCU-LABS 80 NICKEL STRIP is a balanced bath and unless it is overheated and used without a cover, the solution will be exhausted uniformly. It is not recommended to replenish spent solution to be economical. The solution should be discarded.

ACCU-LABS 80 NICKEL STRIP contains amines and may cause skin irritation. The components of **ACCU-LABS 80 NICKEL STRIP** operating solution should be handled with care. Proper protective gloves and eye glasses should be used to prevent skin and eye contact. Do not inhale the vapors from the original bath or its operating solution.

WASTE DISPOSAL OF ACCU-LABS 80 NICKEL STRIP

Procedure

1. A pH meter, a separate treatment tank, and a well ventilated area are all required for disposal of spent 80 NICKEL STRIP solution.
2. Dilute the spent ACCU-LABS 80 NICKEL STRIP solution 1:4 with tap water (i.e. 1 volume spent ACCU-LABS 80 NICKEL STRIP and 4 volumes tap water). Agitate well.
3. Add 1 pound lime to each 5 gallons of diluted ACCU-LABS 80 NICKEL STRIP solution. Agitate for ½ hour. Add 1 gallon of 74V Accu-labs precipitant for each 10 gallons of spent diluted solution. Agitate for ½ hour. Add 1 gallon of tap water to each 5 gallons of solution. Agitate for 15 minutes.
4. Add 1 gallon of Patfloc MP for every 25 gallons of treated ACCU-LABS 80 NICKEL STRIP. Agitate for ½ hour. NOTE: this solution aids in settling the precipitate.
5. Allow the precipitate to settle overnight. Decant for filter the supernatant solution into a neutralization tank. Cautiously add 8 fl. oz. of 5 % H₂O₂ to each gallon of supernatant with agitation. Neutralize with 10% H₂SO₄. A precipitate will form. This neutralized portion, including the precipitate, may be poured into the sewage system.
6. The remaining precipitate should be retained for subsequent disposition according to Local, State and Federal regulations.

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