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A2LA Accredited ISO/IEC 17025:2005 Certificate # 2558.01

178-SE

SOAK/ELECTRO and SPRAY CLEANER

ACCU-LABS 178-SE is a new very low foam liquid soak and electrocleaner for ferrous metals, copper and copper plated parts. **178-SE** can also be used as a low-foam spray cleaner. **178-SE** provides rapid soil removal, superior rinseability, and a high level of conductivity. **178-SE** is particularly suited for high speed, reel to reel type applications.

ACCU-LABS 178-SE can be used as a combination soak/electrocleaner to remove a wide range of oils, greases, and lubricants and provide high conductivity levels to remove smut, particulates and other films. As a spray cleaner, **178-SE** will not generate foam, rinses free and leaves no other residues. **178-SE** may be made up in warm or cold water. In addition to providing cleaning for plated material, **178-SE** also keeps plating barrels and other equipment oil free.

Summary of Features:

- **Completely Soluble Potassium Based Liquid**
- **Excellent for Reel to Reel Applications**
- **Low Foaming, Non-Silicated Spray Cleaning**
- **Suitable for Micro-Filtration**
- **Economy of Operation, Long Bath Life & Reduced Waste Treatment**
- **Keeps Barrels Clean, Minimizes Down Line Contamination**
- **Inventory Friendly, Only One Product to Purchase & Store**
- **Rapid Cleaning Times, Added Productivity**
- **Contains a Chrome Reducer**
- **High Conductivity for Direct & Reverse Polarity Electrocleaning**

OPERATING GUIDELINES:

Concentration	5-15% for Soak and Electrocleaning and 0.5 to 4% for Spray Cleaning (recommend pre-testing per application)
Temperature	110-180°F (43-82°C)
Polarity Reverse Current	Use work as anode
Polarity Direct Current	Use work as cathode
Current Density Reverse	25-50 ASF at 4 Volts
Current Density Direct	50-125 ASF at 6 Volts
Dwell Time	2-10 Seconds Typical
Voltage	6-9
Cathodes	Perforated nickel plated steel or mild steel

A minimum current density of 25 ASF is necessary for effective cleaning. Reverse cleaning offers the advantage of removing smut and other films that may contribute to roughness, poor corrosion resistance, cloudy plating deposit and poor adhesion. Reverse cleaning must be done at lower current densities with shorter dwell times than direct cleaning or dezincification of brass may occur. In all cases, the use of removable nickel plated electrodes is recommended. The electrodes should be periodically removed and cleaned to remove deposits of soil.

Solution Makeup:

- Fill tank 2/3 full with warm or cold water
- Slowly add required amount of **Accu-Labs 178-SE** with mild agitation
- Add water to operating level and heat to desired operating temperature

Solution Control Analysis:

- Pipette 10 mL sample of cooled working solution into a 250 mL E-flask containing 50 mL DI water
- Add 3-5 drops phenolphthalein indicator solution
- Titrate with 1.0N HCl until pink color just disappears
- mL of 1.0N HCl x 1.5 = % by volume SE-178

Equipment:

Mild steel or other alkaline resistant tanks; heaters should be mild steel or 316 stainless steel. Stainless steel electrodes should not be used to avoid chromium contamination. Tanks designed with overflow weirs, grease traps and recirculation pumps are recommended for optimum performance and bath life.

Safety:

ACCU-LABS 178-SE is highly alkaline and can cause severe burns. Avoid direct contact with skin and eyes. Use protective gear and eye protection. Flush exposed areas with clean, clear water. Consult a physician for medical attention. Read the Material Safety Sheet for this product before using.

Notice of Disclaimer:

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