

4831 S. Whipple Avenue
Chicago IL 60632
Phone: 773.523.3100 Fax: 773.523.4008
www.accu-labs.com

A2LA Accredited ISO/IEC 17025:2005 Certificate # 2558.01

113 Rin-Bond

113 Rin-Bond is a liquid phosphoric acid type cleaner. It has particular application as a pickling acid for non-ferrous metals prior to plating, providing surface conditioning conducive to excellent adhesion. 113 RIN-BOND works well as a light acid dip for zinc casting; particularly parts with faults such as cold shot or excessive porosity. 113 RIN-BOND is recommended for pickling steel and heat scale removal in some cases, such as pre-phosphating or treatment of difficult alloys.

OPERATING GUIDELINES:

- Zinc Casting- Use **113 RIN-Bond** at 5-10% by volume, room temperature, 5-10 seconds immersion time.
- Copper & Copper Alloys- Use **113 RIN-BOND** at 10-20% by volume, room temperature to 120°F, 5-60 seconds immersion time.
- Steel- Use **113 RIN-BOND** at 20% by volume, $120^{\circ}F \pm 5^{\circ}F$, 1-5 minutes.

ANALYSIS:

- Pipette a 10 ml sample of the 113 bath into a 250 ml E-flask
- Add 30 ml of deionized water
- Add 6 drops of methyl orange indicator
- Titrate with 1.0N sodium hydroxide to a light orange end-point
- Mls titrated x 1.10 = % by volume 113 Rin-Bond

EQUIPMENT:

113 RIN-BOND should be contained in a tank lined with polyethylene, or PVC. Heating coils may be carbon, Teflon® or Teflon® coated stainless.

HANDLING CONSIDERATIONS:

113 RIN-BOND contains phosphoric acid so proper personal protective gear and eye protection should be worn when working with this product. In case of contact with skin, flush with tap water 10-20 minutes. In case of contact with eyes, obtain medical attention. Do not take internally. **Read MSDS prior to use.**

DISCLAIMER:

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding accuracy or completeness of this information.