



Product Data Sheet

Date: 01/03/06

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PRODUCT #: N1102, N1100

MAGNUM NPS-220 and MAGNUM NPS-240

Two step, Non-Peroxide Solder Stripper

DESCRIPTION:

An economical two-step solder stripper that rapidly strips tin/lead or tin deposits from printed circuit boards. ***MAGNUM NPS-220*** removes all but a thin protective layer of metallic tin to inhibit excessive attack on the underlying copper. The protective layer of tin is then removed with ***MAGNUM NPS-240***.

MAGNUM NPS-240 quickly removes the intermetallic layer, leaving a clean, tarnish-free copper surface. It can be used following standard tin strippers, and also to clean copper prior to hot air leveling. It contains no fluorides, peroxide or ammonium compounds.

BENEFITS:

- **Low operating cost**
- **Consistent performance**
- **No attack on laminate**
- **Intermetallic layer protects copper and is quickly removed**
- ***MAGNUM NPS-220* holds 10-15 ounces per gallon of tin**
- ***MAGNUM NPS-240* has been reformulated for brighter copper**

INSTRUCTIONS:

MAGNUM NPS-220 is used "as is" and should not be diluted prior to use. ***MAGNUM NPS-240*** is diluted to 50% with water to form the working solution.

	<u><i>MAGNUM NPS-220</i></u>	<u><i>MAGNUM NPS-240</i></u>
Concentration:	100%	50% with water
Temperature:	70 – 80°F	70 – 80°F
Time:	2 – 5 minutes	1 – 2 minutes
Agitation:	Mechanical	Mechanical
Filtration:	Continuous	

EQUIPMENT:

Tanks should be constructed of polypropylene or PVC.

CONTROL:

MAGNUM NPS-220 will strip tin/lead or tin down to the intermetallic layer. If exposed copper is observed, it is necessary to make additions of ***MAGNUM NPS-220*** Stabilizer. This will be necessary if the solution is in use for more than eight weeks.

MAGNUM NPS-240 strips the intermetallic layer. The working solution will strip over 200 square feet per gallon. Replenishment is not recommended. When stripping time exceeds three minutes, the solution should be replaced.

DISPOSAL:

MAGNUM NPS-220 is not chelated. Adjust the pH of spent solution to pH 8 with caustic soda. The resulting solution should be filtered and the metal hydroxide disposed of in accordance with federal, state and local regulations.

Spent **MAGNUM NPS-240** will contain dissolved and undissolved salts of tin, lead and copper. Precipitate dissolved metals by neutralizing with caustic. Dilute spent working solution four times with cold water. Carefully add dilute caustic to a pH of 8 to 9. Allow precipitated metal salts to settle, and filter the sludge through a filter bag. Adjust filtered solution to pH 6 to 8 with dilute sulfuric acid. Dispose of all materials in accordance with local, state, and federal regulations.

CAUTIONS:

MAGNUM NPS-220 and **MAGNUM NPS-240** contain strong acids and are corrosive; wear goggles, gloves, and protective clothing when handling. Use in well-ventilated areas and avoid breathing vapors. Avoid skin, oral and eye contact. Flush exposed areas immediately with water and consult a physician in case of injury. For eye contact, flush immediately with water and obtain medical attention.

This product should be used only for its intended purpose. The information stated above is based on our laboratory tests and experience, and is accurate to the best of our knowledge. Since actual use is beyond our control, the recommendations or suggestions are made without warranty, expressed or implied.