



## **METRICLEAN 2**

### **Technical Bulletin**

MetriClean 2 is a multi-purpose concentrated instrument cleaner for use in manual cleaning systems, washer sterilizers, washer decontaminators, ultrasonic cleaners and cart washers. MetriClean 2 can help to keep stainless steel instruments looking like new. It also enhances functionality and life of the instruments by helping to remove stains and reduce corrosion.

#### **“Material Compatibility Test”**

Hauser Laboratory. February 1996. Test Report No. L5-2150B.

Procedure: Detrimental effects of MetriClean 2 in comparison to deionized water on representative service materials was evaluated. Nine service materials including 304 stainless steel, anodized aluminum, chromed brass, nickel plated brass, ABS, polycarbonate, polypropylene, polystyrene and red natural rubber were exposed to an accelerated cleaning protocol as follows:

- 10 minute MetriClean 2 soak (1 oz/gal concentrate)
- 1 minute DI water rinse
- 4 minute forced air drying

Result: No degradation of any of the material specimens exposed to MetriClean 2 was observed after 1000 simulated washing cycles. MetriClean 2 did cause the surface of the anodized aluminum to turn dark gray. Color change was detectable within the initial 100 cycles of exposure. The color change observed was found to be a black powdery residue that could be wiped off leaving a gray/gold color to the anodized aluminum surface. No similar discoloration or degradation was observed on the anodized aluminum control specimen that was exposed to de-ionized water.

#### **“Performance Test”**

Hauser Laboratory. February 1996. Test Report No. L5-2150B.

Procedure: The performance of MetriClean 2 in cleaning blood rust and Hucker’s soil from a test instrument was evaluated.

Results: A summary of the results of the performance testing is presented in the following table:

<b>SOIL</b>	<b>SOAK TIME</b>	<b>METRICLEAN 2</b>
Blood Rust	5 minutes	12.0 ± 3.6%
Hucker’s Soil	5 minutes	8.4 ± 3.5%

These data indicate that MetriClean 2 performs better than de-ionized water in the removal of blood rust and Hucker’s soil from the instruments tested.

“Rust Inhibiting Properties Test”

Hauser Laboratory. February 1996. Test Report No. L5-2150B.

Procedure: Two sets of three specimens of 304 stainless steel were cleaned with MetriClean 2 after having been solvent washed. A third set of specimens serving, as the control group was solvent washed only. All of the specimens were then exposed to a salt fog environment for 30 days according to ASTM B 119. This environment is designed to accelerate the corrosion of exposed materials.

Results: At the end of the exposure period the following observations were noted:

- a) After 6.5 hours of exposure, 2 small rust colored spots were observed on one of the control specimens.
- b) After 22 hours of exposure, 2 small rust spots were observed on one of the MetriClean 2 washed specimens.
- c) No other observations of rust or corrosion were observed on any of the exposed specimens.