

Certified by CFIA

## **METAL CLEANER 3 (MC3)**

### **FOR ALUMINUM and ALL OTHER METALS**

#### **APPLICATIONS AND USE**

MC3 Concentrated solution is a biodegradable, phosphate and caustic free alkaline cleaner formulated for general purpose and normal maintenance cleaning applications.

Liquid non-ionic surfactants and detergents are combined in a formulation with excellent detergent wetting capabilities and free rinsing properties which provides exceptional performance for general maintenance cleaning in virtually all industries with virtually all base Materials.

MC3 is an ultrasonic cleaning solution which removes oils and a variety of soils from ferrous metals, steel alloys, titanium alloys, copper and copper alloys, and stainless steel. MC3 is an emulsifying cleaner; oils, soils and greases are entrapped in the cleaning solution and suspended so they cannot redeposit on the clean parts. It contains a special blend of alkalis and detergents in addition to dispersants, deflocculents and emulsifiers. The cleaning solution cleans rapidly, penetrating into blind holes and between adjacent surfaces.

#### **APPLICATION PROCEDURES**

MC3 solution is easily mixed with cold or hot water in a concentration of 7-10% by volume. It can be used over a temperature range from room temperature to 180° (82°C), and can be used in both tabletop and industrial cleaning tanks. Optimum cleaning performance will be realized at higher solution temperature.

For optimum cleaning, MC3 should be operated at recommended temperatures. Cleaning time is dictated by the quantity and nature of the soil. Operating MC3 below the recommended concentrations, temperatures, or time will generally result in poor cleaner performance, characterized by cloudiness and water breaks. Operating MC3 above the recommended parameters may lead to component metal attack or cause the surfactants to separate from the solution causing poor cleaning. It is imperative that the solution be allowed to "degas" at operating temperature for a minimum of 10 minutes prior to placing the parts into the cleaning solution. It is best if ultrasonic energy is applied during this time to enhance degassing. Thorough rinsing in one step must be undertaken for removal of cleaning solution. As with any process involving water, drying must be included as the final step.

#### **CHEMICAL CHARACTERISTICS**

Chemical Composition and detergents	Blend of liquid, non-ionic alkaline surfactants
Flash point	None
Recommended diluent	Water
Biodegradable	Yes
Normal Use Concentration	7-10% by volume
Normal Use Temperature	120-160°F
PH at Rinse temperature	12.5
Rinsability	Good

**See the MSDS for further information**

**CRYSTAL ELECTRONICS INC**  
2-1251 Gorham St. Newmarket, ON L3Y 8Y6  
TEL (905) 953-9129 TOLL FREE 1- 866 669-9728