BRANSON

Chemistry

Metal Cleaner-1 Concentrated Cleaning Formula

APPLICATIONS AND USE

Branson MC-1 Concentrated Solution is a biodegradable, causticfree alkaline cleaner formulated for heavy duty industrial use.

A blend of liquid non-ionic surfactants and detergents, the superior penetrating properties, wetting capabilities, and free rinsing properties of Branson MC-1 Solution combine to provide an exceptional cleaner for removing difficult soils and contaminants. It removes oils and a variety of soils from aluminum and aluminum alloys as well as copper, brass, and steel substrates. Branson MC-1 is particularly effective for removing fabricating oils, cutting oils, and polishing oils.

Branson MC-1 tolerates high levels of contamination. It cleans by displacement – oils, soils, and greases float to the solution surface where they can be removed manually or with mechanical skimmers. Branson MC-1 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

Branson MC-1 Solution is mixed easily with cold or hot water in a concentration of 7-10% by volume. Branson MC-1 Solution can be used over a temperature range from 130°F to 180°F (82°C) in suitable commercial and industrial cleaning tanks. For optimum cleaning, Branson MC-1 should be operated at recommended temperatures. Cleaning time is dictated by the quantity and nature of the soil. Operating Branson MC-1 below the recommended concentrations, temperatures, or time will generally result in poor cleaner performance, characterized by cloudiness and water breaks. Operating Branson MC-1 above the recommended parameters may be lead to component metal attack or cause the sur-



Chemistry

factants 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 is suggested for removal of cleaning solution. As with any process involving water, drying should be considered as the final step. The selection and use of the proper ultrasonic cleaning equipment and component fixturing will influence the cleaning efficiency and performance of Branson MC-1.

When replenishment quantities meet or exceed 15% of the tank volume, the cleaning ability of the operating solutions may be so reduced as to make further additions of Branson MC-1 unproductive and uneconomical. At this point, it is usually more practical to make up a new solution. Periodic pH variation checks can give an indication of solution effectiveness.

CHEMICAL CHARACTERISTICS

Chemical Composition:	Blend of liquid, non-ionic alkaline surfactants, detergents, and wetting agents
Flash Point:	None
Recommended Dilutent:	Water
Biodegradable:	Yes
Phosphate Free:	Yes
Normal Use Concentration:	7 -10% by volume
Normal Use Temperature:	130-180°F (55-82º C)
pH at Use Rinse Temperature:	9.4
Rinsability:	Good

Effect of Working Solution on Metals

Stainless Steel:	None
Steel:	None
Copper:	None
Brass:	None
Aluminum:	None
Magnesium:	None
Zinc:	None
Tin	None

PRECAUTIONARY CONSIDERATIONS

- BRANSON MC-1 SOLUTION CONTAINS MILDLY ALKALINE DETERGENTS, AND DIRECT CONTACT MAY RESULT IN BURNS OF EYES OR SKIN IRRITATION.
- AVOID PROLONGED SKIN CONTACT.
- WASH THOROUGHLY AFTER HANDLING.
- DO NOT TAKE INTERNALLY.
- IF DIRECT CONTACT OCCURS, FLUSH, REPEATEDLY WITH COOL, CLEAR WATER.
- KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

Dispose in accordance with all local, state, and federal regulations.

BRANSON

Branson Ultrasonics Corporation 41 Eagle Road, Danbury, CT 06813-1961 (203) 796-0400 • Fax: (203) 796-9838 www.bransonultrasonics.com e-mail: info@bransonultrasonics.com INFORMATION: For additional information concerning Branson MC-1 Solution or other Branson concentrated cleaning solutions, contact your local Branson sales office or BRANSONIC[®] dealer.

MC-1 Solution © Branson Ultrasonics Corporation 2011 The Emerson logo is a trademark and service mark of Emerson Electric Co. Revised and printed in the U.S.A. 12/2011