FO Fine Organics Inc.

U.S.D.A. Reg. No. 1457-42

D I B A C T O L

Active Ingredients:

Alkyl (C_{14} 95%, C_{12} 3%, C_{16} 2%) Dimethyl Benzyl Ammonium Chloride 100%

Directions for Use

DIBACTOL is a specially prepared quaternary ammonium biocide with excellent hard water resistance in waters up to 600 ppm hardness, calculated as $CaCO_3$ when tested by the method as outlined by C. W. Chambers, Journal of Milk and Food Technology, Volume 19, #7, July-1956, for use in manufacturing, formulating, tableting and dry blending.

Please refer to DIBACTOL Technical Data Sheet for specific bacteriological activity information.

CAUTION

KEEP OUT OF REACH OF CHILDREN

Handle with care. Use only as directed. Harmful if swallowed. Do not get on skin or in eyes. In case of contact with skin, wash skin with soap and water. If irritation persists, get medical attention. In case of contact with eyes, immediately flush with copious amounts of water and get medical attention. DIBACTOL solution must not come in contact with food and the product should not be used in conjunction with soap or anionic detergents.

Fine Organics Inc.
205 MAIN STREET · LODI, NEW JERSEY

FO Fine Organics Inc. **technical data**

205 MAIN STREET, LODI, NEW JERSEY 07644
phone N. J. (201) GR. 2 6600 · N. Y. (212) GR. 5-1030
cable address: MOLCHEM, LODI, N.J.

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REPORT OF BACTERICIDAL EFFICACY & HARDWATER RESISTANCE

Method: "Procedure for Evaluating the Efficiency of Bactericidal Agents." C. W. Chambers, J. Milk & Food Technology, July, 1956.

Temp. of Test: 20°C

Organism: Escherichia coli, ATTC. #11229

Contact Time: 30, 60 and 120 seconds

Medium: Tryptone glucose extract agar plus neutralizer (0.1% Asolectin and 0.7% Tween 80)

Procedure: The sample was diluted so that 1 ml to 100 ml of test water gave 200 ppm of active ingredient. The water tested was made according to Stuart's formula. One ml of culture was added to each flask of test water after it had reached the required temperature. Counts were made after 30, 60 and 120 seconds contact periods by removing 1 ml of mixture and placing it into 9 ml of neutralizing blanks (0.2% Asolectin and 1.5% Tween 80). Serial dilutions were plated into tryptone glucose extract agar and neutralizer.

These tests were run in duplicate. The culture suspension was kept in cracked ice throughout the entire experiment.

Results: The results are summarized in the following table:

BACTERIAL REDUCTIONS

Bacterial Suspension 1 ml plus 100 ml test water
Initial count: 120,000,000
Final count: 100,000,000

	30 Seconds		60 Seconds		120 Seconds	
ppm Hardness	Average Organism per ml	Percent Reduction	Average Organism per ml	Percent Reduction	Average Organism per ml	Percent Reduction
600	1,000	99.999	450	99.999+	10-	99.999+
700	39,000	99.96	3300	99.997	450	99.999+