

US EPA ARCHIVE DOCUMENT

TECHNICAL SUPPORT SECTION (EFFICACY REVIEW - I

Disinfectants Branch

IN 3-3-80 OUT 3-31-80

Reviewed by William E. Campbell, Jr. Date 3-31-80

EPA Reg. No. or File Symbol 10182-RO

EPA Petition or EUP No. 10182-EUP-11

Date Division Received 2-21-80

Type Product(s): I, (D), H, F, N, R, S Swimming Pool

Data Accession No(s). 241815

Product Mgr. No. 32 Castillo

Product Name(s) Baquacil

Company Name(s) ICI Americas, Inc.

Submission Purpose Extension of EUP

Chemical & Formulation Liquid Concentrate

Product weight 8.816 lbs./gal.

Active Ingredient(s): 8

poly(iminoimidocarbonyliminoimidocarbonyliminohexamethylene hydrochloride) . . . . . 20%

200.0 Introduction

200.1 Use:

For experimental use only as a swimming pool water disinfectant.

200.2 Background Information:

An EUP was issued on December 4, 1978 to evaluate the product for the use indicated in 200.1 above. Efficacy data generated from trials at seven public pools (two indoor and five outdoor) in two geographical areas (Pennsylvania and Tennessee) were submitted and found to be adequate. ICI Americas, however, intends to market the product primarily to homeowners and therefore is concerned that the labeling be appropriate for such use.

201.0 Data Summary

201.2 Brief Description of Tests:

1. Objectives:

The objectives of the program as proposed is to verify the adequacy of the labeling for the Baquacil pool care program. The evaluation will focus on:

- a. whether homeowners can cope with the chlorine to Baquacil conversion procedure
- b. whether homeowners use the Baquacil test kit correctly
- c. Baquacil consumption rates in homeowner pools
- d. the extent of esthetic and operational problems in homeowner pools and their solution
- e. verification of compatibility of Baquacil with available supplemental chemicals in real use situations.

Exposure of the chemical in this program is not anticipated to be any different from the last program wherein families of both the very young and old were exposed.

2. Test Program:

The program is designed to be run in homeowner pools. Cooperators (approximately 200) will be asked to use the Baquacil system in their pool over a pool season according to verbal instructions from ICI representatives as well as the prepared labeling. Cooperators will be asked to keep

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a log on usage of Baquacil and supplemental chemicals, pH determinations (to be made weekly), Baquacil concentrations (to be checked weekly), clarity, and any supplemental observations. Visits will be made by ICI representatives to each cooperator in the program on a biweekly basis, at which time the ICI representative will check clarity, pH and Baquacil concentration and discuss any problems the cooperator may have encountered. Also, on a monthly basis, the ICI representative will collect samples of pool water for laboratory analysis of Baquacil concentration, pH, hardness, and alkalinity. Additionally, an ICI representative will be on call at any time to assist the homeowner with any problems he might encounter that would need immediate attention.

3. Product:

The amount of formulated product proposed for use in the program is 15,000 pounds. This is based on the use instructions for the product, i.e., a pool concentration of 50 ppm for 200 + pools over a 4-5 month season. 3,600 pounds of the original EUP material are still on hand. 1,092 pounds were not imported or produced under the 1978 EUP, therefore, it will be necessary to import an additional 11,400 lbs. of formulated material for the proposed program.

4. Location:

The program, as proposed, is for 100 pools in Corpus Christi, Texas and 100 pools in Phoenix, Arizona to run from May through late September, 1980. Additionally, 50 pools in Wilmington, Delaware are proposed for June 1 through September 1, 1980.

5. Program Supervisor:

The program Principal Investigator will be T. B. Young, B.A., M.A., of ICI Americas. Mr. Young's qualifications include the following:

- o Senior Microbiologist, ICI Americas, Inc.
  - o Member of Society of American Microbiologist
  - o Sigma Chi
  - o Experience as Toxicologist and Poison Information Specialist (City of Philadelphia)
  - o Masters Degree in Microbiology - University of Nebraska
  - o Post Graduate Study in Microbiology - University of Pennsylvania
  - o Associate Instructor - Medical School University of Pennsylvania
  - o Post Graduate Study in Pharmacology - Jefferson University
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Mr. Young will be responsible for selecting and training supplemental representatives who will be used to help monitor the program. Details of these representatives and their qualifications will be forwarded at a later date.

6. Storage & Disposition:

All Baquacil to be used in the proposed program will be packaged in 2 gallon containers with child resistant closures at the Central Engineering Laboratories of ICI Americas in Wilmington, Delaware. Stocks of material will be maintained in ICI warehouses in Corpus Christi, Texas and at the Central Engineering Laboratories in Wilmington, Delaware. Additional warehouse space will be rented in Phoenix, Arizona with specific details to be provided at a later date. Pool owners will be provided with appropriate quantities of material (dependent on pool size) for approximately 1 month's usage and will be expected to store the material as they normally would. Any unused material will be collected by ICI Americas representatives and returned to the Central Engineering Laboratories in Wilmington, Delaware, for disposal and/or storage. The material in the pools at the end of the season will not be discharged into the environment, but will be neutralized in situ.

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TECHNICAL SUPPORT SECTION EFFICACY REVIEW - II

Disinfectants Branch

EPA Reg. No. or File Symbol 10182-EUP-11

Date Division Received 2-21-80

Data Accession No(s). 241815

Product Manager No. 32 Castillo

Product Name(s) Baquacil

Company Name(s) ICI Americas Inc.

202.0 Conclusions and Recommendations

202.5 Proposed Experimental Use Programs:

We have no objections to the requested extension of the EUP and no adverse comments on the proposed program at this time.

PM Note: The duplicate copy of the proposed experimental program (Accession No. 241815) is being retained in the Technical Support Section.

Addendum:

The modification to the EUP proposed in your letter of April 1, 1980 have been noted.