EFFICACY EVALUATION AND TECHNICAL MANAGEMENT SECTION

EFFICACY REVIEW-I

ANTIMICROBIAL PROGRAM BRANCH

Date RD Received 07-12-90 Review Start Date 08-13-90
Project Return Date 08-23-90 Review Completion Date 08-13-90
Reviewed by Arnold E. Layne Lind & Carbate 108-13-90
EPA Reg. No. or File Symbol 9367-UL
EPA Petition or EUP No. NONE
Date EPA Received 05-22-90
Type Product(s) LIMITED DISINFECTANT
MRID No(s)415446-02
Product Mgr. No. 31 (LEE)
Product Name MINT-O
Company Name(s) Theochem Laboratories, Inc.
Submission Purpose New application.
Type Formulation Liquid to be used diluted.
Active Ingredient(s) %
Alkyl (C145%, C1628%, C1214%) dimethyl benzyl ammonium chlorides

200.0 Introduction

200.1 Use(s):

The proposed product, Mint-O, is a disinfectant and deodorant for use in restrooms, locker rooms, kitchens, and waste receptacles.

200.2 Background Information

The submission received by RD on 7-12-90 is a new application with efficacy data and proposed product labeling.

201.0 Data Summary MRID #415446-02

Data report dated 10-3-89 was prepared by Paul H. Clarke of Stepan Company. Other data reports, dated 03-14-89, were prepared by Nina L. Crossley and Mark R. Entrup of Hilltop Biolabs, Inc.

- 201.1 Brief Description of Tests
 - a. Disinfection: A.O.A.C. Use Dilution Test, 14th Ed., Chapter 4, 1984.
 - b. Disinfection: A.O.A.C. Use Dilution Method, 14th Ed., Chapter 4, 1984.
- 201.2 Test Summaries
 - a. Disinfection: MRID #415446-02
 - 1. Method: AOAC Use Dilution Test
 - Modification: Inoculum contained 5% horse serum as the organic soil load. All dilutions were prepared in sterile deionized water.
 - 3. Dilution: 6 ounces per gallon
 - 4. Samples:

Batch	Test Dates	Date Prepared
092288*	7-20-89	9-22-88
120188	8-03-89	12-01-88
022289	8-04-89	2-22-89

^{*}represents 60 day old sample

5. Test Organism:

Salmonella choleraesuis ATCC #10708 Phenol Res.: 1:90

- 6. Exposure: 10 minutes at 20°C.
- 7. Subculture: Letheen broth
- 8. Incubation: 48 hours at 37°C.
- 9. Results:

Batch	# Positive/Total	Carriers
092288	0/60	
120188	0/60	
022289	0/60	

All control carrier survival studies were $\geq 1.2 \times 10^6$ org.

- 10. Conclusion: The results show adequate performance of the product against <u>Salmonella choleraesuis</u>.
- b. Disinfection: MRID #415446-02
 - 1. Method: AOAC Use Dilution Method
 - 2. Modification: None
 - 3. Dilution: 6 ounces/gallon (1:21.33 v/v)
 - 4. Samples:

Batch	Test Date	Date Prepared
120188	2-23-89	1-17-89
120188	3-02-89	1-17-89

- 5. Test Bacteria: Salmonella choleraesuis
 ATCC #10708 Phenol Res.: 1:90
- 6. Exposure: 10 minutes at 20°C.
- 7. Subculture: Letheen broth
- 8. Incubation: 48 hours at 37°C.
- 9. Results:

Batch	# Positive/Total Carriers
120188	0/10
120188	0/50

10. Conclusion:

Results indicate adequate performance of the product against Salmonella choleraesuis.

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EFFICACY REVIEW FORM - II

Antimicrobial Program Branch

EPA Reg. No	9367-UL		
Date EPA Received	05-22-90		
Date RD Received_	07-12-90		
Project Return Da	te_ 08-23-90		
Review Start Date	08-13-90		
Review Completion	Date08-13-90		
MRID No(s). 415446-02			
Product Manager N	o. 31 (LEE)		
Product Name(s) _	MINT-O		
_			
Company Name	Theochem Laboratories, Inc.		

202.0 Recommendations

202.1 Efficacy Supported by the Data

The submitted data (MRID #415446-02) supports the effectiveness of the product, diluted 6 ounces per gallon, as a <u>limited disinfectant</u> against <u>Salmonella choleraesuis</u>, when tested in the presence of 5% serum on hard, non-porous inanimate surfaces for a contact time of 10 minutes.

203.0 Labeling

- 1. Revise "This product is designed as a disinfectant deodorant..." to read "This product is designed as a <u>limited disinfectant deodorant against gram negative</u> bacteria..."
- Revise "GENERAL DISINFECTANT" to read "LIMITED DISINFECTANT".