

US EPA ARCHIVE DOCUMENT



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035160

**Chemical:** 1-Octadecanaminium, N,N-dimethyl-N-(3-(t

**PC Code:** 107401

**HED File Code** 12000 Exposure Reviews

**Memo Date:** 02/23/93

**File ID:** 00000000

**Accession Number:** 412-02-0281

*HED Records Reference Center*  
04/23/2002



Case No.: 3148  
Chemical No(s): 107401

OPP OFFICIAL RECORD  
HEALTH EFFECTS DIVISION  
SCIENTIFIC DATA REVIEWS  
EPA SERIES 361

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OREB TRANSMITTAL SHEET FOR PHASE 4 REVIEWS

Transmitted to HED on 12/3/92

Case name: Trimethoxysilyl quats

Chemical name(s): Trimethoxysilyl propyl dimethyl octadecyl ammonium chloride

Data submitter(s): Dow Corning Corporation

CRM: Margarita Collantes Phone #: 703-308-8583

Issues/flags:

This action contains a request for a DATA WAIVER ( )  
TIME EXTENSION ( )  
ALTERED/DELETED USE ( )

Other: The registrant, Dow Corning Corp., is a participant of CMA Antimicrobial Exposure Assessment Group.

Branch: Occupational and Residential Exposure Branch  
Reviewed by: WA Dey Date: 2/9/93

Approvals:  
Section Head: Alan P. Nitch Date: 2/11/93  
Branch Chief: A. Nitch for L. Dorsey Date: 2/12/93  
Division Director: P. A. Dennis - Crisp Date: 2/23/93

Response, by Guideline

Guideline #: 132-1(a) Description: Foliar Residue Dissipation

Is requirement applicable? (Y/N): N

Has an acceptable summary been submitted? (Y/N): N

Data Waiver( ) Time Extension( ) Other ( )

Data Waiver/Time Extension (If applicable) Granted? (Y/N): N/A

Discussion: Trimethoxysilyl propyl dimethyl octadecyl ammonium chloride is an antimicrobial agent (broad spectrum bacteriostat, algacide and fungicide) for use on textiles (i.e., human clothing), special industrial products, carpets or upholstery to control the growth of odor causing bacteria, to reduce deterioration and discoloration caused by fungus in the presence of moisture, to control the growth of mold and mildew etc. This antimicrobial agent can be applied to surfaces as an aqueous solution. Applied at a rate of 0.1% to 1.0% by weight of active ingredient to treated surfaces by dipping, foam application, preservative treatment, sponging or spraying until uniformly wet. No acute toxicity data for the technical grade is available. Since this chemical is not used for typical foliar applications, no exposure due to contact with treated foliage is expected. Therefore, OREB does not require a foliar dislodgeable residue dissipation study for reregistration.

Guideline #: 132-1(b) Description: Soil Residue Dissipation

Is requirement applicable? (Y/N): N

Has an acceptable summary been submitted? (Y/N): N

Data Waiver( ) Time Extension( ) Other ( )

Data Waiver/Time Extension (If applicable) Granted? (Y/N): N/A

Discussion: Trimethoxysilyl propyl dimethyl octadecyl ammonium chloride is an antimicrobial agent (broad spectrum bacteriostat, algacide and fungicide) use on textiles (i.e., human clothing), special industrial products, carpets or upholstery to control the growth of odor causing by bacteria, to reduce deterioration and discoloration caused by fungus in the presence of moisture, to control the growth of mold and mildew etc. This antimicrobial agent can be applied to

1. Use information is based on the LUIS report dated 6/25/91 from Phyllis Johnson of BEAD, and the product labels, EPA Reg. 34292-1 and 34292-2.
2. Tox information was retrieved from the tox one liners dated 12/10/92. The acute dermal toxicity was classified as category 3 (50% formulation) and the acute inhalation toxicity were classified as category 4 (42% a.i.) and 2 (72% a.i.). The toxicological reviewer is John Redden.

surfaces as an aqueous solution. Applied at a rate of 0.1% to 1.0% by weight of active ingredient to treated surfaces by dipping, foam application, preservative treatment, sponging or spraying until uniformly wet. No acute toxicity data for the technical grade is available.<sup>2</sup> Since this chemical is used for indoor applications, minimal soil exposure is expected. Therefore, OREB does not require a soil residue dissipation study for reregistration.

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Guideline #: 133-3

Description: Dermal Exposure

Is requirement applicable? (Y/N): N

Has an acceptable summary been submitted? (Y/N): N

Data Waiver( ) Time Extension( ) Other ( )

Data Waiver/Time Extension (If applicable) Granted? (Y/N): N/A

Discussion: Trimethoxysilyl propyl dimethyl octadecyl ammonium chloride is an antimicrobial agent (broad spectrum bacteriostat, algaecide and fungicide) use on textiles (i.e., human clothing), special industrial products, carpets or upholstery to control the growth of odor causing by bacteria, to reduce deterioration and discoloration caused by fungus in the presence of moisture, to control the growth of mold and mildew etc. This antimicrobial agent can be applied to surfaces as an aqueous solution. Applied at a rate of 0.1% to 1.0% by weight of active ingredient to treated surfaces by dipping, foam application, preservative treatment, sponging or spraying until uniformly wet. No acute toxicity data for the technical grade is available (i.e., no technical grade data)<sup>2</sup>. Based on the use information, the potential for post-application dermal exposure exists. Therefore, OREB does not require a post application dermal exposure study at this time for reregistration.

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Guideline #: 133-4 Description: Inhalation Exposure

Is requirement applicable? (Y/N): N

Has an acceptable summary been submitted? (Y/N): N

Data Waiver( ) Time Extension( ) Other ( )

Data Waiver/Time Extension (If applicable) Granted? (Y/N): N/A

Discussion: Trimethoxysilyl propyl dimethyl octadecyl ammonium chloride is an antimicrobial agent (broad spectrum bacteriostat, algacide and fungicide) use on textiles (i.e., human clothing), special industrial products, carpets or upholstery to control the growth of odor causing by bacteria, to reduce deterioration and discoloration caused by fungus in the presence of moisture, to control the growth of mold and mildew etc. This antimicrobial agent can be applied to surfaces as an aqueous solution. Applied at a rate of 0.1% to 1.0% by weight of active ingredient to treated surfaces by dipping, foam application, preservative treatment, sponging or spraying until uniformly wet. No acute toxicity data for the technical grade is available (i.e., no technical grade data)<sup>2</sup>. Based on the use information, the potential for post-application inhalation exposure exists. Therefore, OREB does not require a post application inhalation exposure study at this time for reregistration.

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Applicable Requirements:

Applicator Exposure Monitoring (Subdivision U)

Guideline #233: Estimation of Dermal Exposure at Indoor Sites

Guideline #234: Estimation of Inhalation at Indoor Sites

Comments:

Trimethoxysilyl propyl dimethyl octadecyl ammonium chloride is an antimicrobial agent (broad spectrum bacteriostat, algacide and fungicide) use on textiles (i.e., human clothing), special industrial products, carpets or upholstery to control the growth of odor causing by bacteria, to reduce deterioration and discoloration caused by fungus in the presence of moisture, to control the growth of mold and mildew etc. This antimicrobial agent can be applied to surfaces as

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  2. Tox information was retrieved from the tox one liners dated 12/10/92. The acute dermal toxicity was classified as category 3 (50% formulation) and the acute inhalation toxicity were classified as category 4 (50% a.i.) and 2 (20% a.i.).

an aqueous solution. Applied at a rate of 0.1% to 1.0% by weight of active ingredient to treated surfaces by dipping, foam application, preservative treatment, sponging or spraying until uniformly wet. Based on the use information, the potential exposure for applicator/mixer/loader is significant. The acute toxicity data does not meet the triggers and the registrant is a participant in the CMA Antimicrobial Exposure Assessment Group.<sup>2</sup> Therefore, OREB does not require the applicator/mixer/loader exposure study for reregistration.

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cc: Winston Dang/OREB  
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Chemical File  
Correspondenc

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