

US EPA ARCHIVE DOCUMENT

Case No.: 3092
Chemical No(s): 107103

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OREB TRANSMITTAL SHEET FOR PHASE 4 REVIEWS

Transmitted to HED on 7/02/92
Case name: 5-Chloro-2-methyl-3(2H)-isothiazoline
Chemical name(s): 5-Chloro-2-methyl-3(2H)-isothiazoline
Data submitter(s): Rohm and Haas Company

CRM: Tom Myers Phone #: 703-308-8074

Issues/flags:

This action contains a request for a DATA WAIVER ()
TIME EXTENSION ()
ALTERED/DELETED USE ()
Other: The registrant is a participant in the CMA Antimicrobial Exposure Assessment Study (MRID # 41412201)

Branch: Occupational and Residential Exposure Branch
Reviewed by: [Signature] Day Date: 8-25-92

Approvals:
Section Head: [Signature] Nich Date: 8/25/92
Branch Chief: [Signature] Lay of R Date: 8/20/92
Division Director: Penelope A. Jenner-Carp Date: 8/31/92

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 () N/A

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

Discussion: 5-chloro-2-methyl-3(2H)-isothiazoline, formulated as a soluble concentrate (liquids and solids), is used as a fungicide and microbicide/microbiostat (slime-forming bacteria, fungi and algae) in a variety of applications including terrestrial (i.e., forest product pressure and protection treatments), indoor non-food (i.e., industrial adhesives/coatings/processing chemicals, fuel/oil storage tank bottom water additive, resin/latex/polymer emulsions, metalworking cutting fluids, oil drilling muds, in latex paints, in pasteurizer/warmer/cannery cooling tower systems, specialty products and textiles), and aquatic non-food industrial uses (i.e., air washer water systems, cooling towers, evaporative condensers, heat exchangers, processing water, scrubbing systems, pulp and paper as well as secondary oil recovery. Treatments are typically made using a variety of industrial equipment (i.e., most not described, metering pumps were identified) and can be of several varieties including shock/slug, initial, intermittent, maintenance, during manufacture and continuous feed. No toxicity data are available. Since 5-chloro-2-methyl-3(2H)-isothiazoline 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 () N/A

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

Discussion: 5-chloro-2-methyl-3(2H)-isothiazoline, formulated as a soluble concentrate (liquids and solids), is used as a fungicide and microbicide/microbiostat (slime-forming bacteria, fungi and algae) in a variety of

¹ Use information based on the LUIS report dated June 19, 1992 (memo 6/30/92) from Margaret Cogdell of BEAD and the product labels (EPA Reg. No. 5009-33, 707-129 and 707-194).

² Toxicity information was retrieved from the toxoneline dated 7/6/92 and was provided from the tox reviewer, Beth Doyle of Toxicology Branch II.

applications including terrestrial (i.e., forest product pressure and protection treatments), indoor non-food (i.e., industrial adhesives/coatings/processing chemicals, fuel/oil storage tank bottom water additive, resin/latex/polymer emulsions, metalworking cutting fluids, oil drilling muds, in latex paints, in pasteurizer/warmer/cannery cooling tower systems, specialty products and textiles), and aquatic non-food industrial uses (i.e., air washer water systems, cooling towers, evaporative condensers, heat exchangers, processing water, scrubbing systems, pulp and paper as well as secondary oil recovery. Treatments are typically made using a variety of industrial equipment (i.e., most not described, metering pumps were identified) and can be of several varieties including shock/slug, initial, intermittent, maintenance, during manufacture and continuous feed. No toxicity data are available. Since 5-chloro-2-methyl-3(2H)-isothiazoline is not used for typical agricultural applications, no exposure due to soil contact is expected. Therefore, OREB does not require a soil residue dissipation study for reregistration.

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 () N/A

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

Discussion: 5-chloro-2-methyl-3(2H)-isothiazoline, formulated as a soluble concentrate (liquids and solids), is used as a fungicide and microbicide/microbiostat (slime-forming bacteria, fungi and algae) in a variety of applications including terrestrial (i.e., forest product pressure and protection treatments), indoor non-food (i.e., industrial adhesives/coatings/processing chemicals, fuel/oil storage tank bottom water additive, resin/latex/polymer emulsions, metalworking cutting fluids, oil drilling muds, in latex paints, in pasteurizer/warmer/cannery cooling tower systems, specialty products and textiles), and aquatic non-food industrial uses (i.e., air washer water systems, cooling towers, evaporative condensers, heat exchangers, processing water, scrubbing systems, pulp and paper as well as secondary oil recovery. Treatments are typically made using a variety of industrial equipment (i.e., most not described, metering pumps were identified) and can be of several varieties including shock/slug, initial, intermittent,

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maintenance, during manufacture and continuous feed.¹ No toxicity data are available. Since the post application dermal exposure to 5-chloro-2-methyl-3(2H)-isothiazoline exists. However, the toxicity data is incomplete (although the acute dermal toxicity is classified as category 2, and no acute inhalation or mutagenicity study are available). Therefore, OREB does not require a post-application dermal exposure study at this time for reregistration.

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 () N/A

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

Discussion: 5-chloro-2-methyl-3(2H)-isothiazoline, formulated as a soluble concentrate (liquids and solids), is used as a fungicide and microbicide/microbiostat (slime-forming bacteria, fungi and algae) in a variety of applications including terrestrial (i.e., forest product pressure and protection treatments), indoor non-food (i.e., industrial adhesives/coatings/processing chemicals, fuel/oil storage tank bottom water additive, resin/latex/polymer emulsions, metalworking cutting fluids, oil drilling muds, in latex paints, in pasteurizer/warmer/cannery cooling tower systems, specialty products and textiles), and aquatic non-food industrial uses (i.e., air washer water systems, cooling towers, evaporative condensers, heat exchangers, processing water, scrubbing systems, pulp and paper as well as secondary oil recovery. Treatments are typically made using a variety of industrial equipment (i.e., most not described, metering pumps were identified) and can be of several varieties including shock/slug, initial, intermittent, maintenance, during manufacture and continuous feed. No toxicity data are available. Since the post application inhalation exposure to 5-chloro-2-methyl-3(2H)-isothiazoline exists. However, the toxicity data is incomplete (i.e., no acute inhalation toxicity data or mutagenicity study are available).² 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 #231: Estimation of Dermal Exposure at Outdoor Sites
- Guideline #232: Estimation of Inhalation Exposure at Outdoor Sites
- Guideline #233: Estimation of Dermal Exposure at Indoor Sites
- Guideline #234: Estimation of Inhalation at Indoor Sites

Comments:

5-chloro-2-methyl-3(2H)-isothiazoline, formulated as a soluble concentrate (liquids and solids), is used as a fungicide and microbicide/ microbiostat (slime-forming bacteria, fungi and algae) in a variety of applications including terrestrial (i.e., forest product pressure and protection treatments), indoor non-food (i.e., industrial adhesives/coatings/processing chemicals, fuel/oil storage tank bottom water additive, resin/latex/polymer emulsions, metalworking cutting fluids, oil drilling muds, in latex paints, in pasteurizer/warmer/ cannery cooling tower systems, specialty products and textiles), and aquatic non-food industrial uses (i.e., air washer water systems, cooling towers, evaporative condensers, heat exchangers, processing water, scrubbing systems, pulp and paper as well as secondary oil recovery. Treatments are typically made using a variety of industrial equipment (i.e., most not described, metering pumps were identified) and can be of several varieties including shock/slug, initial, intermittent, maintenance, during manufacture and continuous feed. No toxicity data are available. Based on the available toxicity data and the fact that the registrant is a participant in CMA's Antimicrobial Study, OREB does not require any additional exposure studies for reregistration.

cc: Winston Dang/OREB
List C Chemical File
Chemical File
Correspondence

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