

United States  
Environmental Protection  
Agency

Prevention, Pesticides  
and Toxic Substances  
(7510P)

EPA-739-R-06-002  
September 2006



# **Reregistration Eligibility Decision For Propylene Glycol and Dipropylene Glycol**

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

**CERTIFIED MAIL**

Dear Registrant:

This is to inform you that the Environmental Protection Agency (hereafter referred to as EPA or the Agency) has completed its review of the available data for the antimicrobials propylene glycol and dipropylene glycol. The Reregistration Eligibility Decision (RED) was approved in the form of a decision memorandum which summarized the regulatory decision for propylene glycol and dipropylene glycol on September 30, 2004.

Based on its review, EPA is now publishing its Reregistration Eligibility Decision (RED) for propylene glycol and dipropylene glycol and its associated human health and environmental risks. A Notice of Availability will be published in the *Federal Register* announcing the publication of the RED.

The RED and supporting documents for propylene glycol and dipropylene glycol will be available to the public in EPA's Pesticide Docket EPA-HQ-OPP-2006-0831 at: [www.regulations.gov](http://www.regulations.gov).

Please note that the attached RED document pertains only to propylene glycol and dipropylene glycol. This RED presents the Agency's conclusions on the dietary, drinking water, occupational and ecological risks posed by exposure to propylene glycol or dipropylene glycol alone. This document also contains product-specific data that the Agency intends to require in Data Call-Ins (DCIs). Note that DCIs, with all pertinent instructions, will be sent to registrants at a later date. Currently, there are no generic data requirements. Additionally, for product-specific DCIs, the first set of required responses will be due 90 days from the receipt of the DCI letter. The second set of required responses will be due eight months from the receipt of the DCI letter.

As part of the RED, the Agency has determined that propylene glycol and dipropylene glycol are eligible for reregistration. Sections IV and V of this RED document describe product-specific data requirements.

If you have questions on this document or the label changes relevant to this reregistration decision, please contact the Chemical Review Manager, Michelle Centra, at (703) 308-2476. For questions about product reregistration and/or the Product DCI that accompanies this document, please contact Marshall Swindell at (703) 308-6341.

Sincerely,

A handwritten signature in black ink that reads "Lilly Shackelford for". The signature is written in a cursive style.

Frank T. Sanders  
Director, Antimicrobials Division

**REREGISTRATION ELIGIBILITY  
DECISION**  
for  
Propylene Glycol and Dipropylene Glycol  
List C  
CASE 3126

Approved By:

A handwritten signature in black ink, appearing to read "Frank T. Sanders for". The signature is written in a cursive style with a large initial "F".

Frank T. Sanders  
Director, Antimicrobials Division  
September 29, 2006

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## **Propylene Glycol and Dipropylene Glycol Reregistration Team**

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MP	Manufacturing-Use Product
MRID	Master Record Identification (number). EPA's system of recording and tracking studies submitted.
MRL	Maximum Residue Level
N/A	Not Applicable
NASS	National Agricultural Statistical Service
NAWQA	USGS National Water Quality Assessment
NG	No Gloves
NMFS	National Marine Fisheries Service
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NPIC	National Pesticide Information Center
NR	No respirator
OP	Organophosphorus
OPP	EPA Office of Pesticide Programs
ORETF	Outdoor Residential Exposure Task Force
PAD	Population Adjusted Dose
PCA	Percent Crop Area
PDCI	Product Specific Data Call-In
PDP	USDA Pesticide Data Program
PF10	Protection factor 10 respirator
PF5	Protection factor 5 respirator
PHED	Pesticide Handler's Exposure Data
PHI	Pre-harvest Interval
ppb	Parts Per Billion
PPE	Personal Protective Equipment
PRZM	Pesticide Root Zone Model
RBC	Red Blood Cell
RED	Reregistration Eligibility Decision
REI	Restricted Entry Interval
RfD	Reference Dose
RPA	Reasonable and Prudent Alternatives
RPM	Reasonable and Prudent Measures
RQ	Risk Quotient
RTU	(Ready-to-use)
RUP	Restricted Use Pesticide
SCI-GROW	Tier I Ground Water Computer Model
SF	Safety Factor
SL	Single layer clothing
SLN	Special Local Need (Registrations Under Section 24C of FIFRA)
STORET	Storage and Retrieval
TEP	Typical End-Use Product
TGAI	Technical Grade Active Ingredient
TRAC	Tolerance Reassessment Advisory Committee
TTRS	Transferable Turf Residues
UF	Uncertainty Factor
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WPS	Worker Protection Standard

## **ABSTRACT**

The Environmental Protection Agency (EPA or the Agency) has completed the human health and environmental risk assessments for propylene glycol and dipropylene glycol and is issuing its risk management decision and tolerance reassessment. The risk assessments, which are summarized below, are based on the review of the required target database supporting the use patterns of currently registered products. As a result of this review, EPA has determined that products containing propylene glycol and dipropylene glycol alone are eligible for reregistration. Products containing propylene glycol and dipropylene glycol in combination with other active ingredients will be reregistered only when all of the active ingredients have been determined to be eligible for reregistration. That decision is discussed fully in this document.



cause a common toxic effect by a common toxic mechanism could lead to the same adverse health effect that would occur at a higher level of exposure to any of the substances individually. Unlike other pesticides for which EPA has followed a cumulative risk approach based on a common mechanism of toxicity, EPA has not made a common mechanism of toxicity finding for propylene or dipropylene glycol and any other substances. Neither propylene nor dipropylene glycol appear to produce a toxic metabolite produced by other substances. For the purposes of this action, therefore, EPA has not assumed that propylene or dipropylene glycol have a common mechanism of toxicity with other substances. For information regarding EPA's efforts to determine which chemicals have a common mechanism of toxicity and to evaluate the cumulative effects of such chemicals, see the policy statements released by the EPA's Office of Pesticide Programs concerning common mechanism determinations and procedures for cumulating effects from substances found to have a common mechanism on EPA's website at <http://www.epa.gov/pesticides/cumulative>.

This document presents the Agency's decision regarding the reregistration eligibility of the registered uses of propylene and dipropylene glycol. In an effort to simplify the RED, the information presented herein is summarized from more detailed information which can be found in the technical supporting documents for these pesticides referenced in this RED. Related documents will be available in the Public Docket at [www.regulations.gov](http://www.regulations.gov).

This document consists of six sections. Section I is the introduction. Section II provides a chemical overview, a profile of the use and usage of propylene and dipropylene glycol, and their regulatory history. Section III gives an overview of the revised human health and environmental assessments based on the data available to the Agency. Section IV presents the reregistration eligibility and risk management decisions. Section V summarizes procedures for the product-specific data call-in (PDCI). Finally, the Appendices contain all use patterns eligible for reregistration, bibliographic information, generic data requirements and studies used to make the reregistration decision, related documents and how to access them, and Data Call-In (DCI) information.















































## Appendix A: Use Patterns Eligible for Reregistration

### Use Categories:

- (1) Agricultural premises and equipment
- (2) Food handling/ storage establishments premises and equipment
- (3) Commercial, institutional and industrial premises and equipment
- (4) Residential and public access premises
- (5) Medical premises and equipment
- (6) Human water systems
- (7) Materials preservatives
- (8) Industrial processes and water systems
- (9) Antifouling coatings
- (10) Wood preservatives
- (11) Swimming pools
- (12) Aquatic areas

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
<b>2. Food Handling/Storage Establishments Premises and Equipment</b>				
Air Treatment (Eating Establishments)	1. 10807-43 - pressurized liquid - automatic dispenser	1. 7 ounce product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	1. information not given on label	1. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	2. 10807-37 & 10807-24 - pressurized liquid - manual spray	2. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	2. spray several times per day	2. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
<b>3. Commercial, Institutional and Industrial Premises and Equipment</b>				
Commercial Premises & equipment	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes; for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Shower Room Premises	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes; for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Air Treatment (Unspecified)	1. 9444-136-pressurized liquid - automatic dispenser	1. metered valve actuates every fifteen minutes - 7 ounce product treats a room up to 30 X 20 X 10	1. information not given on label	1. do not contaminate water, food or feed by storage or disposal
	2. 4822-293-pressurized liquid - manual spray	2. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9)	2. information not given on label	2. avoid contact with food and food utensils
Laundry Equipment	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
Air Treatment (Locker Room)	1. 10807-43-pressurized liquid - automatic dispenser	1. 7 ounces of product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	1. information not given on label	1. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	2. 9444-19-pressurized liquid - automatic intermittent aerosol dispenser	2. 6.2 ounces treats 6,000 cubic feet of closed air space.	2. sprayed at intervals	2. do not contaminate water, food or feed
	3. 10807-37 & 10807-24-pressurized liquid - manual spray	3. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	3. spray several times per day	3. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
Locker Room Premises	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes or for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
Air Treatment (Institutional)	1. 51838-1 - ready to use solution-automatic dispenser operation	1. 7 ounce product for each 6,000 cubic feet of closed air space	1. product sprayed at intervals	1. avoid contamination of food
	2. 51838-1-pressurized liquid - for manual operation	2. fill average size room with mist (approximately 15 sprays)	2. repeat application several times daily	2. avoid contamination of food
	3. 10807-37 & 10807-24-pressurized liquid- manual spray	3. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	3. spray several times per day	3. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	4. 4822-293-pressurized liquid - manual spray	4. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9)	4. information not given on label	4. avoid contact with food and food utensils
	5. 4822-531-pressurized liquid - wall mounted unit in continuous action aerosol can	5. one second spray for a 9.5 X 9 X 7 room	5. information not given on label	5. do not position near heat or electrical sources; do not spray directly onto surfaces; in case of contact with surfaces, wipe immediately with damp cloth.

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
	6. 44446-20-pressurized liquid - manual spray	6. spray for three seconds	6. information not given on label	6. wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
	7. 4822-531-wall mounted unit in metered dose aerosol can or pressurized liquid - hand held unit	<p>7. using a 120 µl valve with .22 ounces of product:</p> <p>-1 time for 2.5 X 2.5 X 7 room</p> <p>-2 times for 4 X 3 X 7 room</p> <p>-3 times for 4.5 X 4 X 7 room</p> <p>-4 times for 5 X 5 X 7 room</p> <p>using a 185 µl valve-</p> <p>-1 time for 3 X 3 X 7 room</p> <p>-2 times for 4.5 X 4 X 7 room</p> <p>-3 times for a 5.5 X 5 X 7 room</p> <p>4 times for a 6 X 6 X 7 room</p>	7. information not given on label	7. do not position near heat or electrical sources; do not spray directly onto surfaces; in case of contact with surfaces, wipe immediately with damp cloth.

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
	8. 10807-43-pressurized liquid - automatic dispenser	8. 7 ounce product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	8. information not given on label	8. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
Air Treatment (Commercial)	1. 51838-1-ready to use solution - for automatic dispenser operation	1. 7 ounce product for each 6,000 cubic feet of closed air space	1. product sprayed at intervals	1. avoid contamination of food
	2. 51838-1-ready to use solution - for manual operation	2. fill average size room with mist (approximately 15 sprays)	2. repeat application several times daily	2. avoid contamination of food
	3. 10807-43 - pressurized liquid-automatic dispenser	3. 7 ounce product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	3. information not given on label	3. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use

Use Site	Formulation	Application Rate (Range)	No. of Applications	Use Limitations
	4. 10807-37 & 10807-24-pressurized liquid - manual spray	4. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	4. spray several times per day	4. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	5. 9444-19 - Pressurized liquid - automatic intermittent aerosol dispenser	5. 6.2 ounces of product treats 6,000 cubic feet of closed air space.	5. sprayed at intervals	5. do not contaminate water, food or feed
	6. 4822-293 - pressurized liquid - manual spray	6. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9)	6. information not given on label	6. avoid contact with food and food utensils
	7. 44446-20-pressurized liquid - manual spray	7. spray for three seconds	7. information not given on label	7. wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
	8. 51838-2 - pressurized liquid - automatic dispenser	8. spray for one second toward center of average size room (10 X 14 X 8)	8. repeat application several times daily	8. spray away from drapes, walls, plastic, vinyl, painted or varnished surfaces

Air Treatment (Transp Facilities)	1. 51838-1-ready to use solution - for automatic dispenser	1. 7 ounces of product for each 6,000 cubic feet of closed air space	1. product sprayed at intervals	1. avoid contamination of food
	2. 4822-293-pressurized liquid - manual spray	2. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9	2. information not given on label	2. avoid contact with food and food utensils
	3. 10807-37 & 10807-24 - pressurized liquid - manual spray	3. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	3. spray several times per day	3. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	4. 51838-1-ready to use solution - for manual operation	4. fill average size room with mist (approximately 15 sprays)	4. repeat application several times daily	4. avoid contamination of food



Air Treatment (Industrial)	1. 51838-1-ready to use solution - automatic dispenser	1. 7 ounces of product for each 6, 000 cubic feet of closed air space	1. product sprayed at intervals	1. avoid contamination of food
	2. 51838-1-ready to use solution - for manual operation	2. fill average size room with mist (approximately 15 sprays)	2. repeat application several times daily	2. avoid contamination of food
	3. 10807-37 & 10807-24-pressurized liquid - manual spray	3. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	3. spray several times per day	3. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	4. 10807-43-pressurized liquid - automatic dispenser	4. 7 ounces of product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	4. information not given on label	4. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use

<b>4. Residential and Public Access Premises</b>				
Air Treatment (Unspecified)	1. 9444-136-pressurized liquid - automatic dispenser	1. metered valve actuates every fifteen minutes - 7 ounce product treats a room up to 30 X 20 X 10	1. information not given on label	1. do not contaminate water, food or feed by storage or disposal
	2. 4822-293-pressurized liquid - manual spray	2. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9)	2. information not given on label	2. avoid contact with food and food utensils
Household (Premises & Contents)	44446-20-pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes or for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

Air treatments (commercial/household)	4822-531- pressurized liquid - wall mounted unit in metered dose aerosol can or hand held unit	using a 120 µl valve with .22 ounces of product: -1 time for 2.5 X 2.5 X 7 room -2 times for 4 X 3 X 7 room -3 times for 4.5 X 4 X 7 room -4 times for 5 X 5 X 7 room  using a 185 µl valve- -1 time for 3 X 3 X 7 room -2 times for 4.5 X 4 X 7 room -3 times for a 5.5 X 5 X 7 room 4 times for a 6 X 6 X 7 room	information not given on label	do not position near heat or electrical sources; do not spray directly onto surfaces; in case of contact with surfaces, wipe immediately with damp cloth.
Laundry Equipment	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Automobiles	44446-20 - pressurized liquid - manual spray	spray into air conditioning system and spray for four to six seconds	information not given on label	shut off air conditioner after applying the product; wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

Shower Room Premises	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes or for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Hard Nonporous Surface	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Environmental Inanimate Hard Surfaces	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Garbage Storage Premises & Containers	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes or for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
Bathroom Premises	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes or for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

Air Treatment (Bathroom)	1. 10807-43-pressurized liquid - automatic dispenser	1. 7 ounces of product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	1. information not given on label	1. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	2. 9444-19-pressurized liquid - automatic intermittent aerosol dispenser	2. 6.2 ounce of product treats 6,000 cubic feet of closed air space.	2. sprayed at intervals	2. do not contaminate water, food or feed
	3. 44446-20-pressurized liquid - manual spray	3. spray for three seconds	3. information not given on label	3. wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet
	4. 10807-37-pressurized liquid - manual spray	4. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	4. spray several times per day	4. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use

	5. 51838-1-pressurized liquid - manual operation	5. fill average size room with mist (approximately 15 sprays)	5. repeat application several times daily	5. avoid contamination of food
	6. 4822-293 - pressurized liquid - manual spray	6. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9	6. information not given on label	6. avoid contact with food and food utensils
	7. 4822-531-pressurized liquid - wall mounted unit in continuous action aerosol can	7. one second spray for a 9.5 X 9 X 7 room	7. information not given on label	7. information not given on label
	8. 10807-24 - pressurized liquid- manual spray	8. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	8. spray several times per day	8. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use

	9. 4822-531- wall mounted unit in metered dose aerosol can or pressurized liquid - hand held unit	9. using a 120 µl valve with .22 ounces of product: -1 time for 2.5 X 2.5 X 7 room -2 times for 4 X 3 X 7 room -3 times for 4.5 X 4 X 7 room -4 times for 5 X 5 X 7 room  using a 185 µl valve- -1 time for 3 X 3 X 7 room -2 times for 4.5 X 4 X 7 room -3 times for a 5.5 X 5 X 7 room 4 times for a 6 X 6 X 7 room	9. information not given on label	9. information not given on label
Locker Room Premises	44446-20 - pressurized liquid - manual spray	spray surface until completely wet and allow to remain wet for 10 minutes or for air sanitization spray for three seconds	information not given on label	wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

Air Treatment (Locker Room)	1. 10807-43-pressurized liquid - automatic dispenser	1. 7 ounces of product contains 3400 controlled sprays that will last for 30 days when used on a 24 hour basis or 60 days if used 12 hours per day when set to dispense every 15 minutes (room size not specified)	1. information not given on label	1. do not use in nurseries or rooms where infants, ill or aged patients are confined; food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	2. 9444-19-pressurized liquid - automatic intermittent aerosol dispenser	2. 6.2 ounces treats 6,000 cubic feet of closed air space.	2. sprayed at intervals	2. do not contaminate water, food or feed
	3. 10807-37 & 10807-24-pressurized liquid - manual spray	3. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	3. spray several times per day	3. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
Birds (Caged) (Animal Treatment)	11715-20 - pressurized liquid- manual spray	spray lightly with one burst of 2 or 3 seconds	no more than 2 times per week	information not given on label
Pet Bird Cages (Enclosed Premise Treatment)	11715-20 - pressurized liquid-manual spray	thoroughly spray perches and cage	regular intervals	information not given on label



Air Treatment (Pet Kennels & Enclosed Premise Treatment)	1. 4822-531-pressurized liquid - wall mounted unit in metered dose aerosol can or hand held unit	<p>1. using a 120 µl valve with .22 ounces of product:  -1 time for 2.5 X 2.5 X 7 room  -2 times for 4 X 3 X 7 room  -3 times for 4.5 X 4 X 7 room  -4 times for 5 X 5 X 7 room</p> <p>using a 185 µl valve-  -1 time for 3 X 3 X 7 room  -2 times for 4.5 X 4 X 7 room  -3 times for a 5.5 X 5 X 7 room  4 times for a 6 X 6 X 7 room</p>	1. information not given on label	1. do not position near heat or electrical sources; do not spray directly onto surfaces; in case of contact with surfaces, wipe immediately with damp cloth.
	2. 4822-531-pressurized liquid - wall mounted unit in continuous action aerosol can	2. one second spray for a 9.5 X 9 X 7 room	2. information not given on label	2. information not given on label
	3. 4822-293-pressurized liquid - manual spray	3. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9	3. information not given on label	3. avoid contact with food and food utensils

## 5. Medical premises and equipment

Air treatments (sickroom)	1. 4822-531-pressurized liquid - wall mounted unit in metered dose aerosol can or hand held unit	<p>1. using a 120 µl valve with .22 ounces of product:</p> <p>-1 time for 2.5 X 2.5 X 7 room  -2 times for 4 X 3 X 7 room  -3 times for 4.5 X 4 X 7 room  -4 times for 5 X 5 X 7 room</p> <p>using a 185 µl valve-</p> <p>-1 time for 3 X 3 X 7 room  -2 times for 4.5 X 4 X 7 room  -3 times for a 5.5 X 5 X 7 room  4 times for a 6 X 6 X 7 room</p>	1. information not given on label	1. do not position near heat or electrical sources; do not spray directly onto surfaces; in case of contact with surfaces, wipe immediately with damp cloth.
	2. 4822-531-pressurized liquid - wall mounted unit in continuous action aerosol can	2. one second spray for a 9.5 X 9 X 7 room	2. information not given on label	2. information not given on label

Air treatment (hospital)	1. 51838-2 - pressurized liquid- manual spray	1. spray for one second toward center of average size room (10 X 14 X 8)	1. repeat application several times daily	1. spray away from drapes, walls, plastic, vinyl, painted or varnished surfaces
	2. 51838-1- ready to use solution - automatic dispenser	2. 7 ounces of product for each 6, 000 cubic feet of closed air space	2. product sprayed at intervals	2. avoid contamination of food
	3. 51838-1- ready to use solution - for manual operation	3. fill average size room with mist (approximately 15 sprays)	3. repeat application several times daily	3. avoid contamination of food
	4. 10807-37 & 10807-24 - pressurized liquid - manual spray	4. spray the room until a light fog forms - spray 6 to 8 seconds in an average room (10 X 10)	4. spray several times per day	4. food, food contact surfaces and utensils should be protected from exposure to the spray or rinsed with potable water before use
	5. 4822-293 - pressurized liquid - manual spray	5. spray upward in center of room for 10 seconds in average room of 12 X 12 X 9	5. information not given on label	5. avoid contact with food and food utensils
	6. 44446-20- pressurized liquid - manual spray	6. spray for three seconds	6. information not given on label	6. wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet

	7. 9444-19 - pressurized liquid - automatic intermittent aerosol dispenser	7. 6.2 ounces of product treats 6,000 cubic feet of closed air space	7. sprayed at intervals	7. do not contaminate water, food or feed
Hospital (Premises and Materials)	44446-20- pressurized liquid -manual spray	decontamination against HIV-1 of surfaces/objects soiled with blood/body fluids - 1800 ppm of active quaternary water for a contact time of 10 minutes at room temperature - use a 10 minute contact time for disinfection against all other bacteria and fungi claimed	information not given on label	dispose of infectious materials according to federal, state and local regulations

## Appendix B: Table of Generic Data Requirements and Studies Used to Make the Reregistration Decision

### **Guide To Appendix B**

Appendix B lists the **generic** (not product specific) data requirements which support the re-registration of propylene glycol and dipropylene glycol. These requirements apply to propylene glycol and dipropylene glycol in all products, including data requirements for which a technical grade active ingredient is the test substance. The data table is organized in the following formats:

1. **Data Requirement** (Columns 1 and 2). The data requirements are listed by Guideline Number. The first column lists the new Part 158 Guideline numbers, and the second column lists the old Part 158 Guideline numbers. Each Guideline Number has an associated test protocol set forth in the Pesticide Assessment Guidance, which are available on the EPA website.
2. **Guideline Description** (Column 3). Identifies the guideline type.

**Use Pattern** (Column 4). This column indicates the standard Antimicrobial Division use patterns categories for which the generic (not product specific) data requirements apply. The number designations are used in Appendix B.

3.
  - (1) Agricultural premises and equipment
  - (2) Food handling/ storage establishments premises and equipment
  - (3) Commercial, institutional and industrial premises and equipment
  - (4) Residential and public access premises
  - (5) Medical premises and equipment
  - (6) Human water systems
    - Materials preservatives
  - (8) Industrial processes and water systems
    - Antifouling coatings
    - Wood preservatives
    - Swimming pools
  - (7) Aquatic areas
4. **Bibliographic Citation** (Column 5). If the Agency has data in its files to support a specific generic Guideline requirement, this column will identify each study by a “Master Record Identification (MRID) number. The listed studies are considered “valid” and acceptable for satisfying the Guideline requirement. Refer to the Bibliography appendix for a complete citation of each study.

<b>DATA REQUIREMENT</b>				<b>CITATION(S)</b>
<b>New Guideline Number</b>	<b>Old Guideline Number</b>	<b>Study Title</b>	<b>Use Pattern</b>	<b>MRID Number</b>
<b><u>TECHNICAL GRADE ACTIVE INGREDIENT (TGAI) CHEMISTRY</u></b>				
830.1550	61-1	Product Identity and Composition	2,3,4,5	43178601, 43179501
830.1600 830.1620 830.1650	61-2A	Starting Materials and Manufacturing Process	2,3,4,5	43178601, 43179501
830.1670	61-2B	Formation of Impurities	2,3,4,5	43178601, 43179501
830.1700	62-1	Preliminary Analysis	2,3,4,5	43178601, 43179502, 43858501
830.1750	62-2	Certification of Limits	2,3,4,5	43178601, 43179502
830.1800	62-3	Analytical Method	2,3,4,5	43178602, 43179502
830.6302	63-2	Color	2,3,4,5	43178603, 43179503
830.6303	63-3	Physical State	2,3,4,5	43178603, 43179503
830.6304	63-4	Odor	2,3,4,5	43178603, 43179503
830.7200	63-5	Melting Point	2,3,4,5	Not required
830.7220	63-6	Boiling Point	2,3,4,5	43178603
830.7300	63-7	Density	2,3,4,5	43178603
830.7840 830.7860	63-8	Solubility	2,3,4,5	43178603, 43179503
830.7950	63-9	Vapor Pressure	2,3,4,5	43178603, 43179503
830.7370	63-10	Dissociation Constant in Water	2,3,4,5	Not required

<b>DATA REQUIREMENT</b>				<b>CITATION(S)</b>
<b>New Guideline Number</b>	<b>Old Guideline Number</b>	<b>Study Title</b>	<b>Use Pattern</b>	<b>MRID Number</b>
830.7550 830.7560 830.7570	63-11	Partition Coefficient (Octanol/Water)	2,3,4,5	43178603, 43179503
830.7000	63-12	pH	2,3,4,5	43178603, 43179503
830.6313	63-13	Stability	2,3,4,5	43178603, 43179503
830.6314	63-14	Oxidizing/Reducing Action	2,3,4,5	Not required
830.6315	63-15	Flammability	2,3,4,5	43178603, 43179503
830.6316	63-16	Explosibility	2,3,4,5	Not required
830.6317	63-17	Storage Stability	2,3,4,5	43178603, 43179503
830.7100	63-18	Viscosity	2,3,4,5	43178603, 43179503
830.6319	63-19	Miscibility	2,3,4,5	43178603, 43179503
830.6320	63-20	Corrosion Characteristics	2,3,4,5	43178603, 43179503
830.6321	63-21	Dielectric breakdown voltage	2,3,4,5	Not required
<b><u>ECOLOGICAL EFFECTS</u></b>				
850.2100	71-1	Avian Acute Oral Toxicity Test - Quail/duck	2,3,4,5	43762301, 43888002 43760807
850.1075	72-1 c	Fish Acute Toxicity - Rainbow Trout	2,3,4,5	Open literature
850.1075	72-1 c	Fish Acute Toxicity - Fathead Minnow	2,3,4,5	Open Literature
850.1010	72-2 a	Acute Aquatic Invertebrate Toxicity	2,3,4,5	43762302, 43888003, 43760808

DATA REQUIREMENT				CITATION(S)
New Guideline Number	Old Guideline Number	Study Title	Use Pattern	MRID Number
850.1300	72-4 a	Fish Early Life Stage	2,3,4,5	Not required
850.1400	72-4 b	Aquatic Invertebrate Life Cycle	2,3,4,5	Not required
Non-guideline	Non-guideline	Acute Aquatic Invertebrate Toxicity - Waterflea ( <i>Ceriodaphnia dubia</i> )	N/A	Not required; Open literature
Non-guideline	Non-guideline	Acute Aquatic Invertebrate Toxicity - Waterflea ( <i>Daphnia magna</i> )	N/A	Not required; Open literature
Non-guideline	Non-Guideline	Acute Aquatic Invertebrate Toxicity – Brine Shrimp ( <i>Artemia salina</i> )	N/A	Not required; Open literature
<u>TOXICOLOGY</u>				
870.1100	81-1	Acute Oral - Rat	2,3,4,5	43760801, Open literature
870.1200	81-2	Acute Dermal - Rabbit	2,3,4,5	43760802, Open literature
870.1300	81-3	Acute Inhalation – Rat	2,3,4,5	43760803, Open literature
870.2400	81-4	Acute Eye Irritation - Rabbit	2,3,4,5	43760804, Open literature
870.2500	81-5	Acute Skin Irritation - Rabbit	2,3,4,5	43760805, Open literature
870.2600	81-6	Dermal Sensitization	2,3,4,5	43760806, Open literature
870.3100	82-1a	Subchronic (Oral) Toxicity –Rodent	2,3,4,5	46892504, 46892208, Open literature
870.3465	82-4	90-Day (Inhalation) Subchronic Toxicity	2,3,4,5	46892103
870.4100	83-1a	Chronic (Oral) Toxicity - Rodent	2,3,4,5	46892509, Open literature
870.4100	83-1a	Chronic (Inhalation) Toxicity - Rodent	2,3,4,5	Open literature



















































