

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

JAN 1 3 2014

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Rhonda Vance-Moeser Product Stewardship Regulatory Manager for, The Dow Chemical Company 1650 Joseph Drive 100 Larkin Center Midland, MI 48674

Subject: AQUCARTM THPS 75 Water Treatment Microbiocide

EPA Registration Number 464-8126

Your Notification Dated November 25, 2013

EPA Received Date November 27, 2013

The notification referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA, as amended, to add refillable container language to the product labeling, is acceptable.

The notification has been part of the permanent record of this file.

If you have any questions concerning this letter, please contact Karen M. Leavy-Munk at (703)-308-6237.

Sincerely,

Marshall Swindell

Product Manager 33

Regulatory Management Branch I Antimicrobial Division(7510C)

Please read instructions on reverse beforempleting form.		Form Appr	(roved)	OMB No. 20	70-0060	≗ Pr	int Form	
United States Environmental Protecti Washington, DC 20	<i>!</i>	×	Registrat Amendm Other		OPP Ide	ntifier Number		
Application for Pesticide - Section I								
1. Company/Product Number 464 - 8126		2. EPA Product Manager Marshall Swindell			3. Proposed Classification			
4. Company/Product (Name) Dow Chemical / AQUCAR THPS 75 Water Treatment Mic	crobiocid PN	3			7 L	None	Restricted	
5. Name and Address of Applicant (Include ZIP Code) The Dow Chemical Company 1803 Building Address Check if this is a new address	(b) to:	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. Product Name						
Section - II								
Resubmission in response to Agency letter dated Notification - Explain below. Explanation: Use additional page(s) if necessary. (For section of the sectio	clude a refillak	Agency let "Me Too" Other - Exp	ter dat Applica	ition.	to			
Section - III								
1. Material This Product Will Be Packaged In: Child-Resistant Packaging Yes* No * Cartification must be submitted Unit Packaging If "Yes" Unit Packaging wgt. No. per Unit Packaging wgt.	Water Solu Yes No If "Yes" Package w	No. per)r	2. Type of C	Container Metal Plastic Glass Paper Other (S	pecify)	,	
3. Location of Net Contents Information 4. Size(s) R	etail Container		5. Lo	cation of Labe	Directio	ns		
6. Manner in Which Label is Affixed to Product Lither Pape				ng accom	accompanying product			
	Section	- IV		T-1-V-1	00000	 _	00000	
1. Contact Point (Complete items directly below for identificat	tion of individue	to be contacted,	if nec				· · · · · · · · · · · · · · · · · · ·	
Name Rhonda Vance-Moeser	Title PSS Regula	e S Regulatory Manager				Telephone Ho. (Include Area Code) (989) 686-1884 ေ ႏိုင္ငံ		
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. Construction Received Construction I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.								
2. Signature Pigitally signed by Rhonda Vance-Moeser Rhonda Vance-Moeser Div: on-Rhonda Vance-Moeser, o, ou, email-gymnoeser@dow.com, c=US Paic 2013,112,515,515,615,0500	3. Title Product Ste	wardship Regu	latory	Manager			(((

5. Date

November 25, 2013

4. Typed Name

Rhonda Vance-Moeser



The Dow Chemical Company Midland, MI 48674

November 25, 2013

Office of Pesticide Programs (7504P)
Document Processing Desk (NOTIF)
U. S. Environmental Protection Agency
One Potomac Yard, Room S-4900
2777 S. Crystal Drive
Arlington, Virginia 22202-4501

Overnight Mail

NOTIFICATION: AQUCAR™ THPS 75 Water Treatment Microbiocide EPA Reg. No. 464-8126

The Dow Chemical Company (Dow) hereby submits a label Notification for EPA Reg. No. 464-8126. Specifically, we are requesting to add the following refillable container language to the label.

Label option for refillable containers of all sizes

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning of the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty contents into application equipment and triple rinse. Pour or pump rinsate into application equipment or rinsate collection system. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

In order for the application to be processed the required Notification statement is included below.

"This Notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and Lamay be subject enforcement action and penalties under section 12 and 14 of FIFRA"

Enclosed are the following documents to support this notification

- 1) Completed application for Pesticide Registration, Form 8570-1.
- 2) Required notification statement and three copies of the product label; one with changes highlighted

Please contact me if you have any questions or need additional information.

Sincerely,

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Rhonda Vance-Moeser Product Stewardship Regulatory Manager 1650 Joseph Drive 100 Larkin Center Midland, MI 48674

Phone: (989) 636-1884 e-mail: rgvmoeser@dow.com

Enclosures

TMTrademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

AQUCAR THPS 75 Water Treatme

KEEP OUT OF REACH OF CHILDREN **DANGER**

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER

Danger • Corrosive• Causes Eye Daimage And Skin Irritation • Do Not Get In Eyes, On Skin, Or On Clothing. • Wear Long-Sleeved Shirt And Long Pants Or Coveralls, Goggles, Face Shield And Chemical Resistant Gloves When Handling • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals • Harmful If Inhaled • Avoid Breathing Vapor Or Mist • Harmful Or Fatal If Swallowed • Avoid Contamination Of Food • Wash Thoroughly With Soap And Water After Handling And Before Eating, Drinking, Chewing Gum, Using Tobacco Or Using The Toilet • Remove And Wash Contaminated Clothing Before Reuse.

User Safety Recommendations

Users must wash hands before eating, drinking, chewing gum, or using the toilet. Users must remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users must remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS

This product is toxic to fish.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Storage:** Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. Keep container tightly closed when not in use. In case of a spill, flood the area with large quantities of water..

Pesticide Disposal: Pesticide wastes are acutely hazardous.Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law.If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Disposal:

Label option for nonrefillable containers of all sizes

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Label option for refillable containers of all sizes

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning of the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty contents into application equipment and triple rinse. Pour or pump rinsate into application equipment or rinsate collection system. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Notice: Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

FOR INDUSTRIAL USE ONLY

Active Ingredient

 Tetrakis(hydroxymethyl) phosphonium sulfate
 76.5%

 Other Ingredients
 23.5%

 Total
 100%

FIRST AID			
If In Eyes	 Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 		
If On Skin Or Clothing	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for treatment advice.		
if inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to mouth, if possible. Call a poison control center or doctor for further treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.		
If Swallowed	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. 		

HOT LINE NUMBER

IN CASE OF AN EMERGENCY endangering life or property involving this product, call collect (989)636-4400. Have product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. Maintain adequate ventilation and oxygenation of the patient. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

E.P.A. Regisເຕລ໌ເເວິດ No. 464-8126 °ເຮົາຊືA. Est. xxx-xxx-xxx

Produced For - When Produced By Contract Manufacturer



The Dow Chemical Company Midland, Michigan 48674 989-636-4400

® ™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

NET CONTENTS: XXX Gallons NET WEIGHT: XXX lbs / XXX kg LOT NO:

ent Microbiocide

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

OIL FIELD AND PETROCHEMICAL OPERATIONS
AQUCAR THPS 75 Water Treatment Microbiocide is effective in controlling sulfate reducing bacteria, general aerobic bacteria, including microorganisms that contribute to biofilm formation in oil field recovery, processing and distribution applications and supporting systems; such as injection water, water holding tanks, disposal well water, recirculating water handling systems, and pipelines. AQUCAR THPS 75 Water Treatment Microbiocide has been shown to dissolve iron sulfide and sequester iron when used under these conditions, leading to improved filter life and well injectivity, and reduction of hydrocarbon sheen. AQUCAR THPS 75 Water Treatment Microbiocide is also effective for use in controlling microbial growth in fluids used for drilling and stimulation of oil and gas wells.

WATER FLOODS

AQUCAR THPS 75 Water Treatment Microbiocide should be added to a water flood system at a point where uniform mixing will occur.

For a noticeably fouled system, add 93-350 ppm AQUCAR THPS 75 Water Treatment Microbiocide. When added to a flowing system, slug dose for 2-6 hours based on flow rates. Repeat as necessary until control is achieved. Subsequent Treatment:

Once control has been achieved, add 14-98 ppm AQUCAR THPS 75 Water Treatment Microbiocide weekly or as needed to maintain control. When added to a flowing system, slug dose for 2-6 hours based on flow rates. Continuous Treatment:

AQUCAR THPS 75 Water Treatment Microbiocide can be dosed continuously at a level of 14-67 ppm.

OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

AQUCAR THPS 75 Water Treatment Microbiocide should be added at a point in the pipeline where uniform mixing will occur. The application should be conducted to ensure maximum distribution of product through the internal surface of the pipeline by adding an amount of biocide which eventually comes out the other end of the pipeline. Criteria for success of the treatment will be reduction in bacterial count and/or corrosion rates. Slug Dosing:

Follow instructions for water flood treatment.

Continuous Dosing:

AQUCAR THPS 75 Water Treatment Microbiocide can be dosed continuously at a level of 14-100 ppm.

DRILLING MUDS, PACKER FLUIDS, COMPLETION AND WORKOVER **FLUIDS**

AQUCAR THPS 75 Water Treatment Microbiocide should be added to these fluids at a point where uniform mixing will occur. Add 33 - 1400 ppm of product to a freshly prepared fluid depending on severity of contamination.

GAS STORAGE WELL AND SYSTEMS

Individual injection wells should be treated with AQUCAR THPS 75 Water Treatment Microbiocide at the same application rates and in the same manner as described under Water Floods. Injections should be repeated as needed to maintain control. Individual drips should be treated with a sufficient quantity of product to produce a concentration of 33.3-133.3 ppm when diluted by the water present in the drip. Injections should be repeated as needed to maintain control.

WELL REMEDIATION OPERATIONS

Individual production or injection wells may be bullheaded with AQUCAR THPS 75 Water Treatment ညီငွေဂူဂူးခိုင်းde to control bacteria and simultaneously dissolve iron sulfide deposits. Pump the product into the well as a solution in water containing from 13.33 to 40% AQUCAR THPS 75 Water Treatment Microbiocide. The well should be shut-in for a period of time (at least 6 hours) then put back into operation. 000000

HYDROTESTING

Water used to hydrotest pipelinesor vessels should contain 66.6-666.5 ppm AQUCAR THPS 75 Water Treatment Microbiocide, depending on water quality and length of time the equipment will remain idle.

PIPELINE PIGGING AND SCREPING OPERATION Add AQUCAR THPS 75 Water Treatment Microbiocidesto a slug of water immediately following the scraper (ideally this water vilume can be kept to a minimum and contained between the scraper and a trailing pig). Sufficient product should be added to produce a concentration of 70-700 ppm in the water at the discharge point or pig trop, depending on the length of the pipeline and the severity of biofouling.

INDUSTRIAL AND COMMERCIAL RECIRCULATING COOLING WATER SYSTEMS

Note: For cooling water systems of equal to or greater than 4000 gallons, do not apply by open pouring of liquid to cooling water systems; a metering pump delivery system is required for this use and application method. For control of bacteria, fungi and algae

Initial Slug Dose:

Add 93-350 ppm of AQUCAR THPS 75 Water Treatment Microbiocide based on total water volume. Repeat until control is obtained. Thereafter, add either intermittently 35-140 ppm of AQUCAR THPS 75 Water Treatment Microbiocide (26-105 ppm THPS) or continuously 18.6-65.3 ppm of AQUCAR THPS 75 Water Treatment Microbiocide per day. Dirty systems must be cleaned prior to treatment.

INDUSTRIAL FRESH WATER SYSTEMS
AQUCAR THPS 75 Water Treatment Microbiocide is effective in controlling algae in holding ponds and controlling bacteria and fungi in holding and processing tanks of industrial fresh water systems supplying wa to pulp and paper mills, textile mills and other manufacturing plants. In pulp and paper mills, treatment of t fresh water with AQUCAR THPS 75 Water Treatment Microbiocide can make an important contribution to slir control. The use of AQUCAR THPS 75 Water Treatment Microbiocide as described will reduce the developm of slime in fresh water pipes and other equipment, and on the pulp and paper mill machine parts contacted fresh water. If water is used in the manufacture of paper and paperboard products that may contact food t concentration of THPS in the slurry can not exceed 84 ppm.

For the control of algae in industrial fresh water systems, AQUCAR THPS 75 Water Treatment Microbioci should be added to provide a concentration of 1.33-13.33 ppm of product. Treatment should be based on a mount of water entering a pond or reservoir or leaving the pond or reservoir and entering the immedia processing operations. While treatment can be made continuously, regular slug-dosing treatment will provi adequate control.

INDUSTRIAL WASTEWATER SYSTEMS

Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks

AQUCAR THPS 75 Water Treatment Microbiocide should be added to a wastewater system or sludge a convenient point of uniform mixing such as digester. Add 333.33-1666.66 ppm of AQUCAR THPS 75 Wa Treatment Microbiocide to wastewater or sludge.

MACROFOULING CONTROL

AQUCAR THPS 75 Water Treatment Microbiocide should be added continuously to maintain a level of 20 p active ingredient (THPS) in the system for a period of at least 96 hours. Initial Dose:

When macrofouling is present in the system, apply 26.66 ppm of AQUCAR THPS 75 Water Treatme

Microbiocide based on total water volume.

Continue to add AQUCAR THPS 75 Water Treatment Microbiocide as needed to maintain the 20 ppm act ingredient (THPS) level for a period of at least 96 hours.

SERVICE WATER AND AUXILIARY SYSTEMS

AQUCAR THPS 75 Water Treatment Microbiocide should be added to service water and auxiliary systems the same application rates and in the same manner as described above. It should be added to the system a point of uniform mixing such as a basin area, sump area, or other reservoir or collecting area from which treated water will be circulated uniformly throughout the system.

HEAT TRANSFER SYSTEMS

Evaporative Condensers, Dairy Sweetwater Systems, Hydrostatic Sterilizers and Retorts, Brewery and Ott Pasteurizers, and Warmers

Add AQUCAR THPS 75 Water Treatment Microbiocide at the same application rates, and in the same mani as described above. It should be added to the system at a point of uniform mixing such as a basin area, su area, or other reservoir or collecting area from which the treated water will be circulated uniformly through the system.

AIR WASHER SYSTEMS

For control of bacteria and fungi

Note: This product may be used only in air washer systems which have mist eliminating components.

Pre-clean the system with detergent and allow air washer to run with fan on for two hours. Flush and chi nozzles, manually cleaning as necessary. Add 35-93.3 ppm of AQUCAR THPS 75 Water Treatme Microbiocide at a point where uniform mixing and even distribution will occur. Repeat as needed to maint

PAPER AND PAPERBOARD MANUFACTURING

For control of bacteria, fungi and algae.

For use as a slimicide in the manufacture of paper and paperboard products and adhesives that do not cont food.

Dosing: Additions should be made at a point in the system where mixing action is good, e.g. raw stock ch beater or mixing unit. Add intermittently or continuously depending on mill conditions.

Intermittent Dosing: Add 32.7-1333.3 ppm of AQUCAR THPS 75 Water Treatment Microbiocide based

total water volume or an equivalent based on dry weight of paper produced.

Continuous Dosing: Add 53.3 – 186.7 ppm of AQUCAR THPS 75 Water Treatment Microbiocide based total water volume or an equivalent based on dry weight of paper produced.

COATINGS, PIGMENTS AND FILLER SLURRIES

Note: Do not use in paper and paperboard and adhesives that will contact food.

For use as a preservative to retard microbial growth in water-based coatings, starches, pigments and fi slurries. The treatment rate necessary to retard spoilage of the additive will vary with the extent contamination of make-up water and the length of storage.

Dosing: Apply from 233.33-666.5 ppm of AQUCAR THPS 75 Water Treatment Microbiocide to the additive

be preserved based on the total weight of the additive and water.

EMULSION AND SOLUTION PRESERVATION

Note: Not for use in manufacture of paper and paperboard products and adhesives that may come in cont with food.

For the preservation of solutions, emulsions, adhesives and other aqueous liquid products, add 0.0233% 0.233% AQUCAR THPS 75 Water Treatment Microbiocide. Add at a point in the processing system where th will be sufficient time and agitation for good mixing and dispersion. The exact amount of AQUCAR THPS Water Treatment Microbiocide to be added for the preservation of given formulations will depend on components as well as local storage time and requirements.

FIRE PROTECTION SYSTEMS

AQUCAR THPS 75 Water Treatment Microbiocide is effective at controlling microbial growth in waters and pipe surfaces in fire protection systems. Such microbial growth when combined with other forms of corros can lead to accelerated corrosion rates and pitting corrosion, commonly referred to as microbiologics influenced corrosion. AQUCAR THPS 75 Water Treatment Microbiocide also removes free oxygen from water, thus eliminating an important nutrient for bacteria and an important reactant in many corrosion reactio AQUCAR THPS 75 Water Treatment Microbiocide should be added to a fire protection system using a chem metering pump capable of variable pump rates. AQUCAR THPS 75 Water Treatment Microbiocide should injected at a point, such as a riser, manifold or makeup feed water line, where uniform mixing and distributed will occur. Add 100-400 ppm AQUCAR THPS 75 Water Treatment Microbiocide depending on severity microbial contamination in the system. Repeat as needed.

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