VARIQUAT⁶ LC80 Algicide

May 1973

QUATERNARY AMMONIUM COMPOUND FOR CONTROL OF ALGAE IN SWIMMING POOLS (EPA Registration No. 18533-1)

DESCRIPTION: VARIQUAT LC80 algicide is an excellent algae control agent for use in swimming pools. At use levels as low as 2.5 ppm (2 ppm active) in water, growth of the following algae is prevented:

Chlorella pyrenoidosa Phormidium inundatum Phormidium retzii

TYPICAL PROPERTIES

FormColorless viscous liquidpHNeutralSpecific Gravity 25°C0.94; 7.8 lb/galComposition0.94; 7.8 lb/galActive Ingredients11% C₁₆, 3% C₁₀, 2% C₁₈)dimethylbenzyl ammoniumdimethylbenzyl ammoniumchloride80.0%Inert Ingredients20.0%

A suitable concentrate for retail sale could contain 10% active quaternary, and would be use by mixing 1 part (by weight) VARIQUAT LC80 with 7 parts (by weight) of water. A specimen label for such a formulated product is included in this data sheet.

The following addition pattern is recommended when using a formulated swimming poolalgicide containing 10% active quaternary.

If pool is clear initially, add one gallon of 10% active quaternary solution for each 50,000 gallons of water. This corresponds to a level of 2 ppm active quaternary in the pool. Thereafter, maintain this level by adding one quart of 10% active product every 3 to 5 days.

If algae are visible at the start, add 4 gallons of 10% active product for each 50,000 gallons of water. Allow algae to agglomerate, then clean out the pool. After cleaning, proceed as if the pool were clear initially, as described above.

All formulated algicidal products must carry an EPA Registration Number on labels when sold in interstate commerce. This is obtained from the Environmental Protection Agency, Pesticides Office, Washington, D.C. 20250. Test data are required for registration.

ACCEPTED

JUL 24, 1973

UNDER THE FRAT IL MILLECTICIDI

FUNGICIDE AND RUDENTICIDE ACT

FOR ECONOMIC POISON RECISTEA-ED UNDER NO. 4 3 3 1 SUMFET TO ATTACHED COMMENTS.



.

CAUTION: Special care must be exercised when handling VARIQUAT LC80. The following precautions must be observed.

- 2 -

DANGER: KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed. Avoid contamination of food.

First Aid

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse.

If swallowed, promptly drink a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

Note to Physician

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

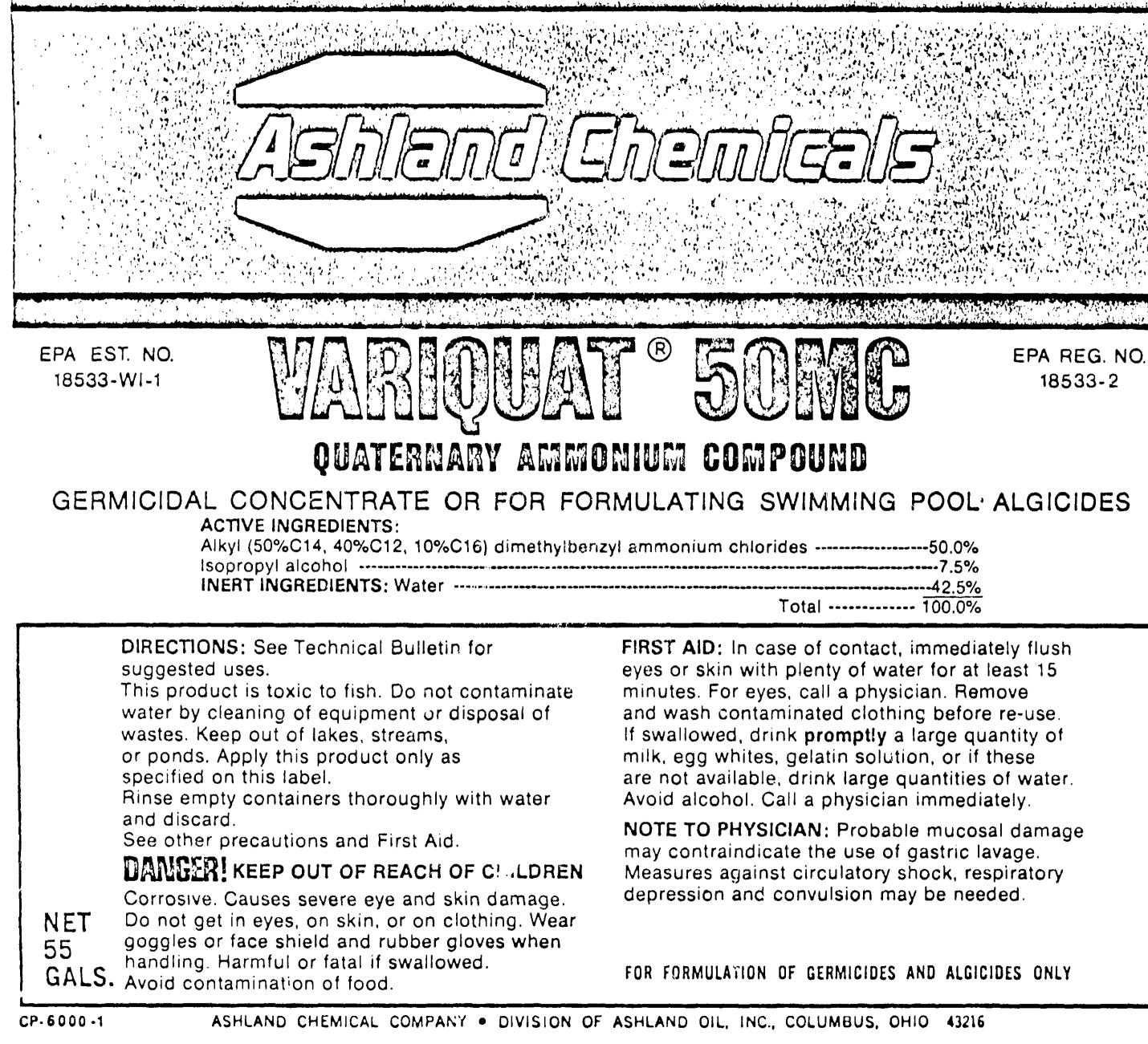
This product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wastes. Keep out of lakes, streams, or ponds.

CODE: 5645-2700

ACCEPTED JUL 24, 1973

UNDER THE FELLIAL INSECTICIDE FUNGICIDE AND RODENTICIDE ACT FON ECONOMIC POISON FEGISITH-ED UNDER NO/**5533** SUBJECT TO ATLACHED COMMENTS.

a 1



	50.0%
	7.5% 42.5%
Total	100.0%

ACCEPTED

AHC 23 1975

UNDER THE FEDELAL INSECTICIDE FUNGICIDE FID RODENTICIDE ACT FOR ECONOMIC POISON REGISTER-10 UNDER NO. 15533

FOR FORMULATION OF GERMI-CIDES AND ALGICIDES ONLY

DANGER --- Corrosive Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed Avoid contamination of food

FIRST AID:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before re-use. If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol Call a physician immediately.



VARIQUAT® 50M

QUATERNARY AMMONIUM COMPOUND GERMICIC TRATE OR FOR FORMULATING SWIMMING POOL

(EPA EST. NO. 18533-WI-1) (EPA REG.

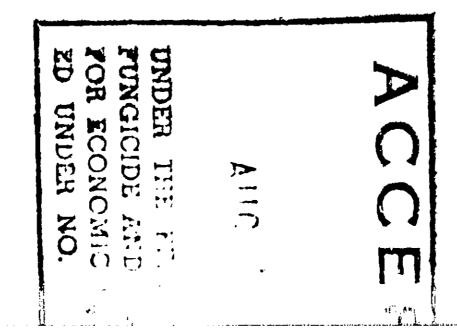
ACTIVE INGREDIENTS:

Alkyl (50%C14, 40%C12, 10%C16)	
dimethylbenzyl ammonium chlorides	
Isopropyl alcohol	
INERT INGREDIENTS:	
Water	
Total	

CP- \$000

DANGER: KEEP OUT OF REACH OF CHILDREN

ASHLAND CHEMICAL CO + DIVISION OF ASHLAND OIL, INC. + P.O. BOX 2219, COLUMBUS, OHIO 43216 (614) 889-3333



·	-
	DIRECTIONS:
EIS	See Technical Bullatin for sug gested uses. This pruduct is toxic to fish Do not contaminate water by cleaning of equipment or dis- posal of wastes. Keep out of lakes, streams, or ponds. Ap- ply this product only as speci- fied on this label.
IC DAL CONCEN	Rinse empty containers thor- oughly with water and discard See other precautions and First Aid on left panel.
i. NO. 18533-2)	NOTE TO Physician:
	Probable mucosal damage may contraindicate the use of gas- tric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.
	NET CONTENTS:

Cameraman's Note

Poor Copy

DANGER:

KEEP OUT OF REACH OF CHILDREN

Corrosive: Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed. Avoid contamination of food.

FIRST AID:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Re-move and wash contaminated clothing before re-use. If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.



VARIQUAT[®] 80MC GERMICIDAL CONCENTRATE

(EPA REG. NO. 18533-4)

ACTIVE INGREDIENTS:

Alkyl (50%C14, 40%C12, 10%C16) dimethylbenzyl ammonium cl Isopropyl alcohol

INERT INGREDIENTS:

Total

FOR FORMULATION OF GERMICIDES ONLY

CP-4340 ASHLAND CHEMICAL CO. • DIVISION OF ASHLAND OIL, INC. • P. O. BOX 2219, COLUMBUS, OHIO 43216 (614) 889-3333

18533 1974 UNDER FUNCICIES ACT STORE ACT FOR ECONOR COMPANY REGISTER-ED UNDER RO. 1833 374 SUBJECT TO ATTRACTO COMMENTS.

DIRECTIONS:

See Technical Bulletin for suggested uses.

This product is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wastes. Keep out of lakes, streams, or ponds.

Do not reuse empty drum. Return to drum reconditioner or destroy by perforating or crushing and burying in a safe place.

See other precautions and First Aid on left panel.

NOTE TO **PHYSICIAN:**

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

hlorides	80.0%
	12.0%
	8.0%
	100.0%