

# **Huntington**

## **FMB 4500-5 QUAT** concentrated germicide

FOR FORMULATION OF DISINFECTANTS, SANITIZERS, FUMIGANTS, WATER TREATMENT INCALCULATES SWIMMING POOL ALGACIDES, BLENDED OR FRESH WATER PLOOD AND SALT WATER DISPOSAL PRODUCTS

**ACTIVE INGREDIENTS**

N-ALYL(14.00% C 10.00% C 12.00% C 18.00%) QUATERNARY AMMONIUM SALTS

50.00%

**INERT INGREDIENTS**

50.00%

Total

100.00%

### **DANGER: KEEP OUT OF REACH OF CHILDREN.**

**STATEMENT OF PRACTICAL TREATMENT:**

In case of contact immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician if not relieved. Drink plenty of large quantities of milk, egg whites, gelatin, sugar, and bread are not advised. Drink large quantities of water. Avoid alcohol. Call a physician immediately.

**NOTE TO PESTICIDE MANUFACTURERS:** Because of the design of the container, the use of special storage measures and special handling should be observed. Labels and instructions may be required.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Caustic. Causes severe eye and skin irritation. In contact with eyes, it causes severe irritation. Avoid contact with eyes. Wear goggles or face shield and rubber gloves when handling the concentrate. The toxic material is absorbed through the skin.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish and aquatic life and is especially toxic to shellfish. It is also toxic to birds and mammals. Do not apply to public water supplies. Do not apply to food crops. Do not apply to ornamental plants. Do not apply to lawns.

**PERSONAL AND DOMESTIC HAZARDS**

Do not use in the kitchen. Do not use in the bathroom. Do not use in the bedroom. Do not use in the living room.

### **STORAGE AND DISPOSAL**

Store in a cool, dry place. Do not store in a room where food is stored. Do not store in a room where children play. Do not store in a room where pets are kept. Do not store in a room where people sleep.

**PESTICIDE DISPOSAL**

Do not pour down the drain. Do not pour on the ground. Do not burn. Do not incinerate. Do not use as a fertilizer. Do not use as a soil amendment. Do not use as a soil conditioner. Do not use as a soil improver.

**CONTAINER DISPOSAL**

Do not reuse. Do not reuse for any other purpose. Do not reuse for any other use. Do not reuse for any other application. Do not reuse for any other function. Do not reuse for any other activity.

**METAL CONTAINERS**

Do not use for any other purpose. Do not use for any other use. Do not use for any other application. Do not use for any other function. Do not use for any other activity.

**INSTRUCTIONS FOR FORMULATION**

Do not use for any other purpose. Do not use for any other use. Do not use for any other application. Do not use for any other function. Do not use for any other activity.

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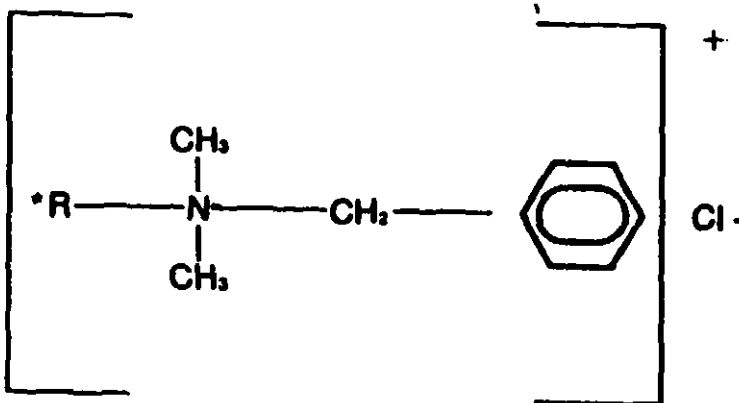
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**Not Reviewed. Registrant claims to be in accordance with the registration of Pesticide Product Guidance for Phase 2 Response, Page 2.12, Active to Inert Change in Status.**

# FMB 4500-5 QUAT

concentrated germicide

EPA Chemical Reference Number: 69104



n-alkyl \* (C<sub>14</sub> 60%, C<sub>16</sub> 30%, C<sub>12</sub> 5%, C<sub>18</sub> 5%)  
dimethyl benzyl ammonium chloride

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EPA Registration Number 47371-16

Not Reviewed. Registrant claims to be in accordance with Reregistration of Pesticide Product Guidance for Phase 2 Response, Page 2.12, Active to Inert Change in Status.

HS-N

# FMB 4500-5 QUAT

concentrated germicide

## I. INGREDIENT STATEMENT

Active Ingredients:

n-alkyl \* (C<sub>14</sub> 60%, C<sub>16</sub> 30%, C<sub>12</sub> 5%, C<sub>18</sub> 5%) dimethyl benzyl ammonium chloride . . . . . 50.0%

Inert Ingredients . . . . . 50.0%

Total 100.0%

## II. CHEMICAL AND PHYSICAL PROPERTIES

A. Appearance: A clear straw to light amber liquid with a mild odor. Crystallization may occur after prolonged storage at low temperatures, but will return to its homogeneous liquid state upon warming.

B. Specific Gravity at 25°C: 0.945 - 0.985

C. pH (10% solution in distilled water): 6.0 - 8.0

D. Activity: 50% min.

E. Color (Gardner): 3 max.

F. Average Molecular Weight: 377.3

G. Amine Hydrochloride: 1.25% max.

H. Free Amine plus Amine Hydrochloride: 1.5% max.

I. Flash Point (TCC): 114°F.

J. Solubility: Freely soluble in water, lower alcohols, ketones and glycols.

K. Compatibility: FMB 4500-5 Quat is compatible with inorganic detergent builders, organic chelates, nonionic surfactants and most polar solvents. FMB 4500-5 Quat is cationic; and therefore, is incompatible with soap or anionic surfactants.

L. Acute Toxicity Results:

- 1. eye irritation: severe irritant
- 2. skin irritation: primary skin irritant
- 3. dermal LD<sub>50</sub>: 3g/Kg
- 4. oral LD<sub>50</sub>: 1g/Kg

# FMB 4500 QUAT

Concentrated Germicide

FMB 4500 Quat series are designed for formulation of disinfectants, sanitizers, fungicides, water treatment microbicides, swimming pool algaecides, mildewcides, oil field water flood and salt water disposal products. FMB 4500 Quats consist of an effective system of alkyl dimethyl benzyl ammonium chlorides. The multi-purpose quats provide you with an efficient chemical for formulation of disinfectant-sanitizers.

Our Quality Control program consists of checking each and every batch made, chemically and microbiologically to insure the customer that every batch meets our rigid specifications.

	FMB 4500-5	FMB 4500-8	FMB 4500-28
<u>Chemical Composition</u>			
EPA Registration Number	47371-16	47371-12	47371-22

**Active Ingredients:**

n-Alkyl (C <sub>14</sub> 60%, C <sub>16</sub> 30%, C <sub>12</sub> 5%, C <sub>18</sub> 5%) dimethyl benzyl ammonium chloride	50%	80%	80%
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**Inert Ingredients:**

Water	40%	7.5%	X
Ethanol	10%	12.5%	20%

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

The FMB 4500 Quats are effective against the representative gram-positive pathogen *Staphylococcus aureus*, the representative gram-negative pathogen *Salmonella choleraesuis*, and the representative hospital pathogen *Pseudomonas aeruginosa*.

FMB 4500 Quats are designed for formulation of germicides. For example, disinfectant cleaners in hospitals and nursing homes, as disinfectant cleaners for use in schools and colleges, hotels and motels, office buildings, households, medical and dental offices, veterinary clinics, dairy and poultry farms.

FMB 4500 Quats are effective in disinfecting pre-cleaned hard, non-porous surfaces in 10 minutes with a recommended use solution of 550 ppm active quat for hospital use areas and with a recommended use solution of 400 ppm active quat for general use areas.

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Not Reviewed. Registrant claims to be in accordance with Reregistration of Pesticide Product Guidance for Phase 2 Response, Page 2.12, Active to Inert Change in Status.

<u>Organism</u>	<u>FMB Quat</u>	<u>No. of Positives</u>	<u>No. of Carriers Tested</u>
Pseudomonas aeruginosa	550 ppm	0	180
Staphylococcus aureus	400 ppm	0	180
Salmonella choleraesuis	400 ppm	0	180

HOSPITAL DISINFECTION . . . . . 550 ppm quat  
GENERAL OR HOUSEHOLD DISINFECTION . . . . . 400 ppm quat  
SANITIZATION. . . . . 200 ppm quat

FMB 4500 Quats are effective against Staphylococcus aureus and E. coli as a sanitizer in 550 ppm hard water as tested by the A.O.A.C. Germicidal and Detergent-Sanitizer Method at 200 ppm quat. In addition to use on food processing equipment and utensils, FMB 4500 Quats may be used on food-contact surfaces in public eating places.

FMB 4500 Quats sanitize precleaned food contact surfaces in one minute with the recommended use solution diluted in water up to 550 ppm water hardness (calculated as CaCO<sub>3</sub>) at 200 ppm active quat. FMB 4500 Quats are in compliance with 21 CFR §178.1010 (b) (9) and (c) (6).

FMB 4500 Quats are designed for formulation of sanitizer-cleaners for use in restaurants and bars, dietary areas, dairy and poultry farms, federally inspected meat and poultry processing plants, and food processing plants such as:

For use in plants operating under federally inspected Poultry, Meat, Rabbit, Shell Egg Grading, and Egg Products Inspection Programs. FMB 4500 Quats are for use as a sanitizer on all surfaces not always requiring a rinse. Before using these compounds, food products and packaging materials must be removed from the room or carefully protected. A potable water rinse is not required following use of these compounds on previously cleaned hard surfaces provided that the surfaces are adequately drained before contact with food so that little or no residue remains which can adulterate or have deleterious effect on edible products. A potable water rinse is required following use of these compounds under conditions other than those stated above.

For use in sanitizing dishes, silverware, glasses, and other food utensils at 200 ppm active quat. FMB 4500 Quats may be used on food contact surfaces in public eating places. Do not rinse with potable water.

Food eggs that have been sanitized with FMB 4500 Quat shall be subjected to a thorough potable water rinse only if they are broken for use in the manufacture of egg products.

For use to wash the udders, flanks, and teats of dairy cows. Do not rinse with potable water. Use a fresh towel for each cow. Avoid contamination of wash solution by dirt and soil. Do not dip towel back into wash solution. When solution becomes visibly dirty, discard and provide fresh solution.

en tested for ten different nitrosamines including  
e (NDEL). It was determined that the FMB 4500 Quats  
parts per billion (ppb) and for the other nine nitro-  
contained less than 100 ppb.

product are responsible for EPA registration for their  
For technical service and registration assistance, con-  
Division at 219/356-8100. A complete registration  
upon request.

of formulated products in USDA inspected meat, poultry,  
ants must be obtained by the formulator from USDA.

Causes severe eye and skin damage. Do not get in eyes  
contaminated clothing before reuse. Wear goggles or face  
ves when handling this product. Harmful or fatal if  
contamination of food.

**L TREATMENT**

Immediately flush eyes or skin with plenty of water for  
For eyes, call a physician. If swallowed, drink promptly  
milk, egg whites, gelatin solution, or if these are not  
e quantities of water. Avoid alcohol. Call a physician

robable mucosal damage may contraindicate the use of  
ures against circulatory shock, respiratory depression,  
needed.

Other instructions and precautionary statements before

**TOXICITY TEST RESULTS**

Some irritation  
on: severe, corrosive irritant  
.8 ml./kg.  
.46 ml./kg.

FMB 4500-5 Quat	EPA Reg. No. 47371-16
FMB 4500-8 Quat	EPA Reg. No. 47371-12
FMB 4500-28 Quat	EPA Reg. No. 47371-22

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