BEST AVAILABLE COP

04 FEB 1985

H & B Chemicals, Div. Div. of Muntington Labs., Inc. 970 E. Tipton St. Nuctington, IN 46750

Attention: Mr. Richard D. Shoots

Contlemen

Subject: FMS 451-5 Quat

EFA Registration No. 47371-11

200 451-8 quet

EM Registration No. 47371-10

788 451-15 Quet

MA Registration No. 47371-17

788 451-20 Qmt

MA Registration No. 47371-18

year Application Dated Ortober 16, 1984

27A Moneired Bated October 24, 1984

The Errebure referred to above, submitted in connection with registration under PIFFA is acceptable provided that you:

 Substit five (5) expire of your final printed labeling before you release the product for shipment.

A stanged copy of the labeling is emcland for your records.

At the next printing of the Breshure, in paragraph 1, pp. 2, replace the wred "Smitians" with the word "Smah" in the sectionse "for the to Mash the widore, flanks...."

CONCUMBENCES

Submit, for your file, a copy of "Anthorizations for these products issued movember 26, 1982," referred to in the USDA letter of Pebruary 22, 1983, copy attached.

Sincerely yours,

Registration Division (TS-767C)

Enclosure

JOB-91005: Miller: Kendrick & Co.: 898-1270: tar: C.Disk: 1/31/85: del. 2/11/85

FMB 451 QUAT

concentrated germicide

FMB 451 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 451 Quats consist of an effective system of alkyl dimethyl benzyl ammonium chlorides. The multipurpose 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.

Chemical Composition	FMB 451-5	FMB 451-8	FMB 451-15	FMB 451-28	
EPA Registration Number	47371-11	47371-13	473/1-17	47371-18	
Active Ingredients: n-Alkyl (C ₁₄ 50%, C ₁₂ 40%, C ₁₆ 10%) dimethyl benzyl ammonium chloride	with CO in EPA L	EPTED MMENTS otter Dated:	50%	80%	
Inert Ingredients:	Fungode, and as amended, registered unc	osteral Insecticide d Redgnygde Act tor the pesticide der EPA Reg. No. 77-18	50%	20%	

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

The FMB 451 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 451 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 451 Quats are for disinfecting precleaned hard, non-porous surface in 10 minutes with a recommended use solution of 800 ppm active quat for hospital use areas and with a recommended use solution of 400 ppm active quat for general use areas.

FMB <u>Quat</u>	No. of Positives	No. of Carriers Tested		
800 ppm	0	180		
400 ppm	0	180		
400 ppm	. 0	180	' '	
	Quat 800 ppm 400 ppm	Quat Positives 800 ppm 0 400 ppm 0	Quat Positives Carriers Tested 800 ppm 0 180 400 ppm 0 180 400 ppm 0 180	

HOSPITAL DISINFECTION	800 ppm qua:
GENERAL OR HOUSEHOLD DISINFECTION	400 ppm quat
SANITIZATION	200 ppm quat

FMB 451 Quats are effective against Starhylococcus aureus and E. coli as a sanitizer in 750 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 451 Quats may be used on food-contact surfaces in public eating places.

FMB 451 Quats sanitize precleaned food contact surfaces in one minute with the recommended use solution diluted in water up to 750 ppm water hardness (calculated as CaCO₃) at 200 ppm active quat. FMB 451 Quats are in compliance with 21 CFR \$178.1010 (b) (9) and (c) (6).

FMB 451 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 451 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 sanitizing dishes, silverware, glasses, and other food utensils at 200 ppm active. FMB 451 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 451 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 sanitize the udders, flanks, and teats of dairy cows. Do not rinse with potable water. Use a fresh towel for each cow. Avoid contamination of sanitizing solution by dirt and soil. Do not dip ***toyel back into sanitizing solution. When solution becomes visibly ..dirty, discard and provide fresh solution.

FMB 451 Quats have been tested for ten different nitrosamines including n-nitroso-digthanplamine (NDEL). It was determined that the FMB 451 Quats contained less than 20° parts per billion (ppb) NDEL and for the other nine nitrosamines FMB 451 Quats*contained less than 200 ppb.

Formulators using this product are responsible for EPA registration and USDA authorization for their formulated products. For technical service and registration assistance, contact H&S Chemicals Division at 219/356-8100. A complete registration package is available upon request.

Authorization for use of formulated products in USDA inspected meat, poultry, and food processing plants must be obtained by the formulator from USDA.

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

STATEMENT OF PRACTICAL TREATMENT

In case of contact, immediately flush eyes with plenty of water for 15 minutes. Call a physician immediately. In case of contact, wash skin thoroughly with soap and water after handling. Call a physician immediately. If swallo d, 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.

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

Consult the label for other instructions and precautionary statements before use of FMB 451 Quats.

TOXICITY TEST RESULTS

Eye Irritation: corrosive irritant
Primary Skin Irritation: severe, corrosive irritant
Acute Dermal LD50 = 0.8 ml./kg.
Acute Oral LD50 = 0.46 ml./kg.

FMB	451~5	Quat	EPA	Reg.	No.	47371-11
FMB	451~8	Quat	EPA	Reg.	No.	4:371-10
FMB	451~15	Quat	EΡΛ	keg.	No.	47371-17
FMB	451-28	Quat	EPA	Reg.	Nc.	47371-18



FEB 0 4 1985

Under the Federal Insecticide, Pungicide, and Rodentscide Act as amended, for the pesticide registered under EPA Rog. No.

H&S Chemicals Division 970 East Tipton Street Huntington, Indiana 46750 219/356-8100

