

# LONZA

## BARQUAT® 4280

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 Chlorides ..... 40%  
n-Alkyl (C<sub>12</sub>, 50%; C<sub>14</sub>, 30%; C<sub>16</sub>, 17%; C<sub>18</sub>, 3%) Dimethyl Ethylbenzyl Ammonium Chlorides ..... 40%  
Ethanol ..... 20%  
100%

55 Gallons/Net Weight: 410 lbs.

EPA Reg. No. 6836-24

### 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. Remove and wash contaminated clothing before reuse. 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.

#### NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock as well as oxygen and measures to support breathing manually or mechanically may be needed. If persistent, convulsions may be controlled by the cautious intravenous injection of a short-acting barbiturate drug.

#### FOR MANUFACTURING USE ONLY

See Technical Bulletin for Recommended Uses

RINSE EMPTY CONTAINER THOROUGHLY WITH WATER  
AND DISCARD IT.

LONZA INC. - FAIR LAWN, N. J. - MAPLETON, ILLINOIS

# LONZA

## PRODUCT INFORMATION

ACCEPTED

NOV 11 1981

UNDER THE FEDERAL TRADE  
 COMMISSION ACT OF 1937  
 FOR ECONOMIC POLICE REGISTERED  
 UNDER NO. 6836-24

**BARQUAT®**  
**4250**  
**BARQUAT®**  
**4280**

**BARQUAT 4250** and **BARQUAT 4280** contain a combination of quaternaries - - alkyl dimethyl benzyl ammonium chlorides and alkyl dimethyl ethylbenzyl ammonium chlorides. This combination gives excellent performance against bacteria in hard water and in a variety of sanitizers, disinfectants, cleaner disinfectants, and deodorizing products. Lonza Research and Technical Service facilities can assist you in the development, formulation, testing, and registration of your product.

### CHEMICAL COMPOSITION:

	BARQUAT	
	4250	4280
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 Chlorides	25%	40%
n-Alkyl (C <sub>12</sub> , 50%; C <sub>14</sub> , 30%; C <sub>16</sub> , 17%; C <sub>18</sub> , 3%) Dimethyl Ethylbenzyl Ammonium Chloride	25%	40%
Ethanol	--	20%
Inert Ingredients:		
Water	50%	--
	100%	100%
Average Molecular Weight:	384	384
EPA Registration Number	6836-25	6836-24

L-85

**AOAC PHENOL COEFFICIENTS**

The Phenol Coefficients for **BARQUAT 4250/4280** are determined by the Official Methods of Analysis A.O.A.C., Tenth Edition, 1965, Para. 5.001 - 5.006. They are reported on a 100% active quaternary basis.

**10 MINUTE KILLING DILUTION**

<u>ORGANISM</u>	<u>ATCC #</u>	<u>BARQUAT 4250/4280</u>	<u>PHENOL</u>	<u>PHENOL COEFFICIENT</u>
Staphylococcus aureus	6538	1:65,000	1:60	1083
Salmonella typhosa	6539	1:65,000	1:80	812

**AOAC USE-DILUTION TEST**

The Use-Dilution procedure for determining the maximum effective dilution for use as a disinfectant is the Official Methods of Analysis, A.O.A.C., Tenth Edition, 1965, Pp. 82-84, Para. 5.007 - 5.011. The following are the effective disinfectant concentrations for **BARQUAT 4250/4280** on an active quaternary basis.

<u>ORGANISM</u>	<u>ATCC #</u>	<u>EFFECTIVE CONCENTRATION</u>
Staphylococcus aureus	6538	400 ppm active quaternary
Salmonella choleraesuis	10708	400 ppm active quaternary

**HARD WATER TOLERANCE**

The hard water tolerance, or speed of kill, of **BARQUAT 4250/4280** is measured by the AOAC Germicidal and Detergent Sanitizer Method (Official Methods of Analysis, Tenth Edition, 1965, Pp. 87-89, Para. 5.023 - 5.032). **BARQUAT 4250/4280** passes this test against both Staph. aureus (#6538) and E. coli (#11229) at 850 ppm of water hardness.

**FUNGICIDAL PERFORMANCE**

**BARQUAT 4250/4280** was tested against Trichophyton interdigitale (#9129) by the AOAC Fungicidal Test (Official Methods of Analysis of the AOAC, Tenth Edition, 1965 - Sections 5.018 to 5.022). A **BARQUAT 4250/4280** dilution of 1:850 passed against T. interdigitale. This dilution is on a 100% quaternary basis.

**RECOMMENDED USE LEVELS**

<u>APPLICATION</u>	<u>RECOMMENDED USE LEVELS</u>
General Disinfection	400 ppm active quaternary
General Sanitization *	200 ppm active quaternary

\*Food contact surfaces and utensils must be rinsed with potable water before use.

**PRODUCT REGISTRATION**

Disinfectant and sanitizer products containing Quaternary Ammonium Compounds which are shipped in interstate commerce, must be registered with the Environmental Protection Agency. Applications for registration must be accompanied by five copies of your proposed label and should be sent to the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250. Some state agencies also require similar registrations.

The Lonza Technical Service Department can assist you with regard to your product registration. A letter of authorization from Lonza is necessary to gain access to the **BARQUAT 4250/4280** registration file.

**HANDLING PRECAUTIONS**

**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. Remove and wash contaminated clothing before reuse.

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.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock as well as oxygen and measures to support breathing manually or mechanically may be needed. If persistent, convulsions may be controlled by the cautious intravenous injection of a short-acting barbituate drug.

Rinse empty container thoroughly with water and discard it.