

US EPA ARCHIVE DOCUMENT

Registration Human Safety Review

PH: Getters - 32 TOX Reviewer: Levi

EPA #	Date	Product Name	Use Classification
6836-39	3/24/77	LONZA Formulation 217	

RECOMMENDATION: OBJECTION EXISTS TO current label & use, to proposed change of ingredient statement in terms of TOX. This product is known to be caustic to skin, eyes & mucous membranes and therefore additional toxicity testing is required. However, the caustic nature of the formulation requires exclusion from home use, yet the label does not clearly indicate for institutional & hospital use only. For home use

	TECH	TECH	FORMULATION	USE DILUTION
Acute Oral (Rat)	LD50			

Toxic signs: The ingredients as proposed add up to 101%, & if it is higher than 100% concentration a skull & cross bones should be required, as for Lonza # 223.

Acute Dermal (Rabbit)	LD50			
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Toxic signs:
Comments:

Acute Inhalation ()	LC50			
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Toxic signs:
Comments:

BEST AVAILABLE COPY

Primary Eye Irritation (Rabbit)				//////
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Comments:

Primary Skin Irritation (Rabbit)				//////
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Comments:

Other Studies:

Instructions: This is a specimen label. You may use this format in developing your own label. Substitute your product's name every place you see "LONZA" in the center panel place your own company name and address where you see "Lonza Inc. . . . etc." Substitute your EPA File No. for our "6836-42" registration number.

LONZA Formulation 223

Concentrated Acid
Disinfectant Toilet Bowl
Cleaner

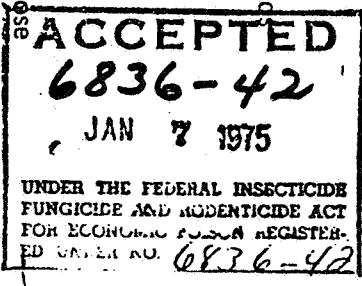
Designed for Institutional and Hospital Use

Based on

Twin Chain Quaternary Ammonium Compounds
and
Detergent Systems
for

Hospitals-Industry-Homes
Disinfects-Cleans-Deodorizes
Removes Stains

Kills Many Germs in Toilet Bowls Including Those
Found in Hospitals
e.g. Pseudomonas aeruginosa & Staphylococcus aureus)



Active Ingredients

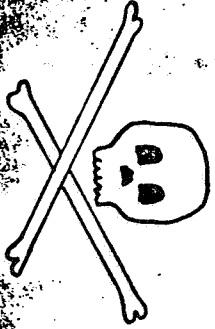
Octyl decyl dimethyl ammonium chloride	1.250%
Dioctyl dimethyl ammonium chloride	0.625%
Didecyl dimethyl ammonium chloride	0.625%
Alkyl* amino betaine	1.000%
Hydrogen chloride	17.500%

inert Ingredients

79.000%
100.000%

Alkyl = C₈, 7%; C₁₀, 8%; C₁₂, 46%; C₁₄, 24%; C₁₆, 10%; C₁₈, 5%
contains no phosphate compounds.

PA REGISTRATION NO. 6836-42



DANGER

POISON

Manufactured By
LONZA INC., 22-10 Route 208, Fair Lawn, N.J. 07410

LONZA FORMULATION 223 is a concentrated acid disinfectant bathroom toilet cleaner designed for institutional and hospital use. This disinfectant toilet bowl cleaner formulated to kill many germs commonly found in hospital, industrial, and home environments. LONZA FORMULATION 223 is designed for use in toilet bowls and urinals. LONZA FORMULATION 223 contains a high level of acid together with an acid compatible detergent system. This unusual combination facilitates the easy removal of resistant stains and permits its disinfectant action.

When used as directed, LONZA FORMULATION 223 cleans, disinfects and deodorizes in one easy step.

USE-DIRECTIONS

Flush toilet. Add 1 fluid oz. (2 tablespoons) directly to water in toilet bowl (½ gallon). Brush to cover all interior surfaces of the bowl including under the rim. Allow disinfectant solution to remain at least 10 minutes. Flush toilet.

For badly stained bowls, repeat above treatment using 2 to 4 fluid ounces of LONZA FORMULATION 223.

For use in urinals, add 1 fluid oz. (2 tablespoons) to ½ gallon of water. Apply by brush to all urinal surfaces. Allow disinfectant solution to remain at least 10 minutes. Flush.

At 1 fluid oz./½ gallon of water, LONZA FORMULATION 223 is effective against a broad spectrum of microorganisms commonly found in toilet bowls and urinals. Effectiveness against Pseudomonas aeruginosa, Salmonella choleraesuis, Staphylococcus aureus, Shigella dysenteriae, Streptococcus faecalis and Escherichia coli has been confirmed by the AOAC Use-Dilution procedure.

Special Note

The cationic detergent system of LONZA FORMULATION 223 inhibits the acid corrosion of metal parts found around toilet bowls and urinals.

DANGER

Corrosive. Keep Out of Reach of Children. May be fatal or harmful if swallowed. Do not breathe vapor or fumes. Produces chemical burns. Do not get in eyes, on skin, or on clothing.

FIRST AID

If swallowed, call a physician immediately. Drink a teaspoonful or more of milk of magnesia or a cup of soapy water followed with milk or raw egg whites.

Eye Contact: Wash with water for 15 minutes. Get prompt medical attention.

Skin Contact: Wipe off the acid gently, immediately flood the surface with water, using soap freely, then cover with moist magnesia or baking soda.