



P.O. Box 639, Route 5-S, Amsterdam, N.Y. 12010

# MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE - 24 HOURS  
(201) 573-5700

Date of issue January 1982 Revised Date September 6, 1985 EPA # 675-47

## I. IDENTIFICATION

- 1. Manufacturer: **National Laboratories, Lyhn and Fink Industrial Products Division of Sterling Drug, Inc., Montclair, NJ 07645.**
- 2. Packager: **Liberty Enterprises, P.O. Box 639, Rte. 5-S, Amsterdam, NY 12010.**
- 3. Trade Name: **Liberty L-671, Pre-measured Quaternary Detergent-Disinfectant-Deodorizer.**
- 4. Intended Use: **For Cleaning, Disinfection and Deodorization of Environmental Surfaces.**

## II. APPARENT HAZARDS

(See Safety and Health information - Sections V, VI and VII.)

Ratings (See section "Guidelines and Definitions")

- 1. Skin Irritation (4) Corrosive
- 2. Eye Irritation (4) Corrosive
- 3. Oral Toxicity (2) Slightly Toxic
- 4. Dermal Toxicity (1) Non-Toxic
- 5. Inhalation Toxicity (-) Not Applicable
- 6. Is product a known strong skin sensitizer? ( ) Yes (X) No

III. PRODUCT COMPOSITION: Does this product contain materials in the following categories? If yes, name each material and whether a major or minor portion is present (minor ingredients - less than 10% of total composition).

1. Metals or metal compounds (including lead, mercury, arsenic, silver, beryllium, cadmium, chromium, manganese, nickel, aluminum, lithium). ( ) Yes (X) No

2. Inorganic compounds (including acids, alkalis, silica or silicates, cyanides, halogenated compounds, phosphates, sulfates, or asbestos.) ( ) Yes (X) No

- Sodium Sulfate ..... 41.0% CAS#77757-82-6
- Sodium Carbonate ..... 10.0% CAS#497-19-8
- Sodium Tripolyphosphate ..... 0.1% CAS#7758-29-4

3. Aliphatic carbon compounds, (including carbon tetrachloride, other halogenated hydrocarbons, formaldehyde, methyl alcohol, acrolein, peroxides, glycols, carbon disulfide, aldehydes, esters or ketones. ( ) Y.
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4. Volatile aromatic carbon compounds, aromatic nitro or amino compounds ( ) Yes ( x ) No
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5. Other materials of importance ( x ) Yes ( ) No
- N-Alkyl Dimethyl Benzyl Ammonium Chlorides ..... 7.45% CAS#8001-54-5  
 N-Alkyl Dimethyl Ethylbenzyl Ammonium Chlorides ..... 7.45% CAS# 27479-28-3  
 Tetrasodium Ethylenediamine Tetraacetate ..... 3.76% CAS#64-02-8  
 Polyoxethylene Cetyl Stearyl Alcohol ..... less than 5.0% CAS#68439-49-6  
 Alkyloxypolyethoxyethanol ..... less than 5.0% CAS#68131-40-8

**IV. REACTIVITY DATA**

1. Is material: Liquid ( ) Solid ( ) Gas ( ) Paste ( ) Powder (X) Aerosol ( )
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2. Is material flammable? ( ) Yes (X) No
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3. Flash point and method used ( ) Yes (X) No
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4. Is material explosive? ( ) Yes (X) No
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5. Are volatile ingredients given off at room temperature? ( ) Yes (X) No
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6. Are volatile ingredients given off when heated during normal use? ( ) Yes (X) No
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7. Is material known to react violently with other materials? If yes, explain ( ) Yes (X) No

**V. HANDLING, STORAGE, TRANSPORTATION, AND DISPOSAL REQUIREMENTS**

PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

DANGER: KEEP OUT OF REACH OF CHILDREN. Corrosive. Do not handle pouches with wet hands. Powder causes eye damage and severe skin irritation. Do not get powder in eyes, on skin or in clothing. Do not open pouches directly. Harmful if swallowed. Avoid contamination of food. Do not remove pouches from package except for immediate use. Wash hands thoroughly after using. 100/1/2 oz. Storage - Store in original container in areas inaccessible to small children. Keep securely closed. Do not contaminate food or feed.

Disposal - Do not reuse empty container. Rinse thoroughly with water and detergent.

**VI. FIRST AID PROCEDURES**

In case of powder contact with eyes or skin, immediately flush with plenty of water for at least 15 minutes. Call physician immediately. Remove and wash contaminated clothing.

If swallowed, drink promptly a large dose of milk, egg white, or gelatine solution. If these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

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

**LIBERTY L-671**  
**Pre-Measured QUATERNARY 256 Detergent-Disinfectant-Deodorizer**

**PRODUCT DATA**

<b>CHARACTERISTIC</b>	<b>TEST METHOD</b>	<b>PHYSICAL PROPERTY/ TEST RESULT</b>
<b>Appearance</b>		<b>Powder in clear water soluble packets</b>
<b>Color</b>		<b>Yellow</b>
<b>Odor</b>		<b>Pine Needle</b>
<b>Bulk Density</b>		<b>0.77 @ 25 C</b>
<b>Water Solubility, %</b>	<b>Room Temp. (12) Should Dissolve within 3 min.</b>	<b>Complete</b>
<b>pH, 1:256</b>	<b>ASTM E-70</b>	<b>10.0</b>
<b>Rinsing Properties</b>	<b>ASTM E-70</b>	<b>Free Rinsing</b>
<b>Abrasives</b>		<b>None</b>
<b>Detergency</b>		<b>Excellent</b>
<b>Deleterious Effects on Flooring (1:256)</b> Vinyl Vinyl Asbestos Asphalt	<b>Federal Specifications PD-220a</b>	<b>Pass Pass Pass</b>
<b>Effects on Conductive Flooring</b> Terazzo Linoleum Vinyl	<b>National Fire Protection Assoc. Standard No. 56A</b>	<b>Pass Pass Pass</b>
<b>Leaker Testing</b>	<b>Visual @ Line. Buckets held 24 hrs. are dropped from 3-4 ft. 3 times &amp; examined</b>	

## PROTECTION INFORMATION

### .. VENTILATION

Not applicable

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### 2. Respiratory Protection

Not applicable

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### 3. Other Protective Measures

Do not handle pouches with wet hands

Do not open pouches directly.

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## VIII. LABELING

Where applicable, this product is labeled and packaged in accordance with the regulations of the following agencies:

- ( ) Department of Transportation, under the Federal Hazardous Materials Transportation Act.
  - ( ) Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act.
  - ( ) Consumer Products Safety Commission under the Federal Hazardous Substances Act.
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The information herein is given in good faith but no warranty, express or implied, is made.

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## GUIDELINES AND DEFINITIONS

**SKIN IRRITATION:** Ratings corresponding to the following definitions are derived from data obtained from the test methods as described in the 16 CFR 1500.41 and categories of toxicity as described in NAS Publication 1138.

1. **Practically Non-irritating:** The undiluted product may cause mild or slight irritation (erythema skin reaction values of 0 or 1) of the intact or abraded skin of rabbits at 72 hours. EPA Category IV.
2. **Moderate Irritant:** The undiluted product causes severe irritation (erythema skin reaction values of primarily 1 and/or 2) of the intact or abraded skin of rabbits at 72 hours. EPA Category III.
3. **Severe Irritant:** The undiluted product causes severe irritation (erythema skin reaction values of primarily 3 or 4 with or without edema) of the intact or abraded skin of rabbits at 72 hours. EPA Category II.
4. **Corrosive:** The undiluted product causes visible destruction, irreversible alterations, or scarring of the tissue structure at the sight of contact on the intact or abraded skin of rabbits. EPA Category I.

**EYE IRRITATION:** Ratings corresponding to the following definitions are derived from data obtained from the test methods described in the 16 CFR 1500.42 and categories of toxicity as described in NAS Publication 1138:

1. **Practically Non-irritating:** The undiluted product, when instilled into the eyes of rabbits, produces minimal effects, clearing in less than 24 hours. EPA Category IV.
2. **Moderately Irritating:** The undiluted product, when instilled into the eyes of rabbits, produces corneal involvement or irritation, clearing in 7 days or less. EPA Category III.
3. **Severely Irritating:** The undiluted product, when instilled into the eyes of rabbits, produces corneal involvement or irritation, clearing in 21 days or less. EPA Category II.
4. **Corrosive:** The undiluted product, when instilled into the eyes of rabbits, produces irreversible destruction of ocular tissue or corneal involvement or irritation persisting for more than 21 days. EPA Category I.

**ORAL TOXICITY:** Ratings corresponding to the following definitions are derived from data obtained from the test methods as described in the 16 CFR 1500.40 and categories of toxicity as described in 40 CFR 162.10:

1. **Non-Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from ingestion studies (LD ) is greater than 5 grams per kilogram of body weight EPA Category IV.
2. **Slightly Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from ingestion studies (LD ) is greater than 500 milligrams per kilogram and less than or equal to 5 grams per kilogram of body weight. EPA Category III.
3. **Moderately Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from ingestion studies (LD ) is greater than 50 milligrams per kilogram and less than or equal to 500 milligrams per kilogram of body weight. EPA Category II.
4. **Very Toxic:** The probable lethal dose of the undiluted product to 50% of the test animals determined from ingestion studies (LD ) is less than or equal to 50 milligrams per kilogram of body weight. EPA Category I.

**DERMAL TOXICITY:** Ratings corresponding to the following definitions are derived from data obtained from the test methods as described in 16 CFR 1500.40 and categories of toxicity as described in 40 CFR 163.100-4.

1. **Non-Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from dermal toxicity studies (LD ) is greater than 2 grams per kilogram of body weight with no mortality observed when this dose is administered. EPA Category IV.
2. **Slightly Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from dermal toxicity studies (LD ) is greater than 2 grams per kilogram of body weight, although some mortality is observed at this dose level. EPA Category III.
3. **Moderately Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from dermal toxicity studies (LD ) is greater than 200 milligrams and less than or equal to 2 grams per kilogram of body weight. EPA Category II.
4. **Very Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from dermal toxicity studies (LD ) is less than or equal to 200 milligrams per kilogram of body weights. EPA Category I.

**INHALATION TOXICITY:** Ratings corresponding to the following definitions are derived from categories of toxicity described in 40 CFR 162.10.

1. **Non-Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from inhalation studies (LC ) is greater than 20 milligrams per liter by volume when inhaled continuously for one hour or less. EPA Category IV.
2. **Mildly Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from inhalation studies (LC ) is greater than 2 milligrams and less than or equal to 20 milligrams per liter by volume when inhaled continuously for one hour or less. EPA Category III.
3. **Moderately Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from inhalation studies (LC ) is greater than 0.2 milligrams and less than or equal to 2 milligrams per liter by volume when inhaled continuously for one hour or less. EPA Category II.
4. **Highly Toxic:** The probable lethal dose of undiluted product to 50% of the test animals determined from inhalation studies (LC ) is less than or equal to 0.2 milligrams per liter of volume when inhaled continuously for one hour or less. EPA Category I.