



MATERIAL SAFETY DATA SHEET

MSDS #CT#FH/H/2001/GSGG-4VHS97
CT#FH/H/2001/GSGG-4VMJG8
CT#FH/H/2001/JEJW-4UMNTY
CT# FH/H/2000/DWDJ-PCNAF

Issue Date: 9/10/02

Revised Date:

SECTION I - CHEMICAL PRODUCT

Identity: **Liquid Laundry Detergent**Brands: **LIQUID ARIEL** (All variations)

Hazard Rating: 1

Health: 1

4=EXTREME

Flammability: 0

3=HIGH

Reactivity: 0

2= MODERATE

1=SLIGHT

Emergency Telephone Number: 24hr P&G Operator - 1-800-879-8433 or call Local Poison Control Center

SECTION II - COMPOSITION AND INGREDIENTS

Ingredients/Chemical Name: Biodegradable surfactants (anionic and nonionic) and enzymes.

Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.

| <u>Chemical Name</u> | <u>Common Name</u> | <u>CAS No.</u> | <u>Recommended Limits</u> | <u>Composition Range</u> | <u>LD50/LC50</u> |
|----------------------|--------------------|----------------|---|--------------------------|------------------|
| Ethyl alcohol | Ethanol | 64-17-5 | ACGIH TWA: 1880 mg/m ³ OSHA PEL & TWA: 1900 mg/m ³ | 1-5% | NA |
| Sodium borate | Borax | 1330-43-4 | ACGIH TWA: 5mg/m ³ | 1 – 5% | NA |
| 2-Aminoethanol | Ethanolamine | 141-43-5 | ACGIH TWA: 7.5 mg/m ³ ACGIH STEL: 15 mg/m ³ OSHA PEL: 6 mg/m ³ OSHA TWA: 8 mg/m ³ OSHA STEL: 15 mg/m ³ | 0.5 – 1.5% | NA |

SECTION III - HAZARDS IDENTIFICATION

Health Hazards (Acute and Chronic):

Ingestion: May cause transient gastrointestinal irritation.

Eye Contact: May cause mild, transient irritation.

Inhalation: Transient irritation with prolonged exposure to concentrated material.

Signs and Symptoms of Exposure:

Ingestion: May result in nausea, vomiting, and/or diarrhea.

Eye Contact: May cause stinging, tearing, itching, swelling, and/or redness.

Skin: Prolonged contact with concentrated material may be drying or transiently irritating to skin.

SECTION IV - FIRST AID INFORMATION**Emergency and First Aid Procedures:**

Ingestion: Drink a glassful of water.
 Eye Contact: Flush with water for 10 to 15 minutes.
 Skin: If prolonged contact occurs, rinse thoroughly with water. If spilled on clothing, change clothes.

If symptoms persist or reoccur, seek medical attention.

Other: Consumer product package has a caution statement: "CAUTION: Eye irritant. Harmful if swallowed. KEEP OUT OF REACH OF CHILDREN. If swallowed, give a glassful of water. Call a physician. In case of eye contact, flush with water."

SECTION V - FIRE FIGHTING INFORMATION

Flash Point (Method Used): —140°F PM CC **Explosive Limits:** *LEL:* N/A *UEL:* N/A

Extinguishing Media: CO₂, water

Special Fire Fighting Procedures: None.

Unusual Fire Hazards: None. This product has a flash point above 150°F. It is an aqueous solution containing ethyl alcohol and it does not sustain combustion.

Stability *Unstable:* *Conditions to Avoid:* None
 Stable: X

Incompatibility (Materials to Avoid): None known

Hazardous Decomposition/By Products: None known

Hazardous Polymerization: *May Occur:* *Conditions to Avoid:* None
 Will Not Occur: X

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: None

Environmental Precautions: DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL REGULATIONS. Small or household quantities may be disposed of in refuse or in sewer. First check with your local water treatment plant. For larger quantities, incineration is preferred. Do not landfill.

Steps To Be Taken in Case Material is Released or Spilled: Flush small or household quantities down acceptable sewer (contains biodegradable surfactants). Prevent spills from reaching a waterway. Sorbents may be used.

SECTION VII - HANDLING AND STORAGE

Precautions To Be Taken in Handling and Storing: No unusual precautions necessary.

Other Precautions: None

SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION**Respiratory Protection (Specify Type):** None required with normal use.**Ventilation** *Local Exhaust:* None required with normal consumer use.*Special:* None*Mechanical (General):* Normal/general dilution ventilation is acceptable. *Other:* None**Eye Protection:** None required with normal consumer use.*Industrial Setting:* If a splash is likely, chemical goggles may be needed.**Protective Gloves:** None required with normal use.*Industrial Setting:* Protective gloves (rubber, neoprene) should be used for prolonged direct contact.**Other Protective Equipment:** None required with normal use.**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES****Boiling Point °F:** 205-207°F**Specific Gravity (H₂O=1):** 1.060**Vapor Pressure (mm Hg):** <29.4**Percent Volatile by Volume (%):** 60.99%-61.66%**Vapor Density (Air=1):** Unknown**Evaporation Rate (nBuOAc=1):** Unknown**Odor Threshold:** N/A**Freezing Point:** N/A**Coefficient of Water/Oil Distribution:** N/A**pH (10% solution):** 8.25**Scooped Density:** N/A**Solubility in Water:** Completely soluble.**Appearance and Odor:** Liquid Ariel is blue in color.
Product is perfumed.**Reserve Alkalinity:** N/A**SECTION X - STABILITY AND REACTIVITY****Possible Hazardous Reactions/Conditions:** None known**Conditions to Avoid:** None**Materials to Avoid:** None**Hazardous Decomposition Products:** None known**Other Recommendations:** None**SECTION XI - TOXICOLOGICAL INFORMATION****SECTION XII - ECOLOGICAL INFORMATION**

Based on ecotoxicity and fate data for the individual ingredients in this specific formulation and for related consumer household cleaning product formulations, it is expected that this product would exhibit a non-hazardous order of toxicity at relevant environmental concentrations.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Disposal is to be performed in compliance with all Federal, state and local regulations. Small or household quantities may be disposed of in refuse or in sewer. First check with your local water treatment plant. For larger quantities, incineration is preferred. Do not landfill.

SECTION XIV - TRANSPORT INFORMATION

The finished product is non-hazardous under DOT.

SECTION XV - ADDITIONAL REGULATORY INFORMATION

All components are listed on the US TSCA Inventory. No components are affected by Significant New Use Rules (SNURs) under TSCA §5.

This Product is not subject to warning labeling under California Proposition 65.

All ingredients are CEPA approved for import to Canada by Procter & Gamble. This product has been classified with Hazard Criteria of the Canadian Control Products Regulation (CPR) and this MSDS contains all information required by the Canadian Products Regulation.

SECTION XVI - OTHER INFORMATION

*N/A. - Not Applicable

*N/K. - Not Known

The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.

The information contained herein has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled product.