

# PalmaClean™ E2 Liquid Antimicrobial Hand Soap



## Technical Dossier

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S H E P A R D B R O S . I N C .

## PalmaClean™ E2 Liquid Antimicrobial Hand Soap

### DESCRIPTION AND APPLICATION

**PalmaClean™ E2 Liquid Antimicrobial Hand Soap** is an NSF-registered E2 classification, benzalkonium chloride-based product. This product meets all USDA requirements for food handling.

### FEATURES AND BENEFITS

- NSF-registered E2 classification (Nonfood Compounds Program Listed (E2) Registration # 151629)
- 0.12% Benzalkonium Chloride (BAC) formula
- pH balanced to skin (pH 5.5) and formulated with emollients to keep hands soft and healthy
- Meets all USDA requirements for food handling
- Kosher certified and Pareve
- Rich, thick lather provides greater product contact with hands for optimal cleaning and reduced cross-contamination in heavily soiled production areas

### EFFICACY – KILLS 99.999% OF 26 TESTED PATHOGENS IN 15 SECONDS

<i>Acinetobacter baumannii</i> ATCC 19606	<i>Haemophilus influenzae</i> ATCC 19418	<i>Staphylococcus aureus</i> ATCC 6538
<i>Bacteroides fragilis</i> ATCC 25285	<i>Klebsiella pneumoniae</i> ATCC 4352	<i>Staphylococcus aureus</i> ATCC 29213
<i>Enterobacter aerogenes</i> ATCC 13048	<i>Klebsiella oxytoca</i> ATC 43165	<i>Staphylococcus aureus</i> MRSA ATCC 33592
<i>Enterococcus faecalis</i> ATCC 29212	<i>Listeria monocytogenes</i> ATCC 19114	<i>Staphylococcus epidermis</i> ATCC 12228
<i>Enterococcus faecalis</i> VRE ATCC 700221	<i>Micrococcus luteus</i> ATCC 7468	<i>Staphylococcus haemolyticus</i> ATCC 29970
<i>Enterococcus faecium</i> ATCC 19434	<i>Proteus mirabilis</i> ATCC 7002	<i>Staphylococcus homonis</i> ATCC 27844
<i>Escherichia coli</i> ATCC 11229	<i>Pseudomonas aeruginosa</i> ATCC 15442	<i>Staphylococcus saprophyticus</i> ATCC 15305
<i>Escherichia coli</i> ATCC 25922	<i>Salmonella choleraesuis</i> ATCC 10708	<i>Streptococcus pneumoniae</i> ATCC 6302
<i>Escherichia coli</i> O157:H7 ATCC 43895	<i>Serratia marcescens</i> ATCC 14756	

### PROPERTIES AND SAFE HANDLING

This product may darken in color over time due to the active ingredient Benzalkonium Chloride, with no deleterious effect on the efficacy of the product so long as the product is used prior to the expiration date. A Safety Data Sheet containing detailed information regarding the properties and safe handling of **PalmaClean™ E2 Liquid Antimicrobial Hand Soap** is available upon request. Dispensers for this product are available from Shepard Bros.

(Rev. 6/2016)

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Shepard Bros., Inc. ▪ 503 S. Cypress St. La Habra, CA 90631 ▪ (800) 645-3594 ▪ [www.shepardbros.com](http://www.shepardbros.com)



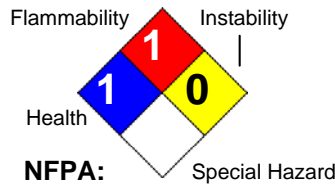
**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Code:** SBPCLNF.4/1G  
**Product Name:** PalmaClean E2 Foaming Antimicrobial Hand Soap  
**Company Name:** Shepard Bros., Inc. **Phone Number:** +1 (562)697-1366  
503 S. Cypress St.  
La Habra, CA 90631  
**Web site address:** www.shepardbros.com  
**Emergency Contact:** CHEMTREC +1 (800)424-9300  
**Product Category:** Hand Soap

**2. HAZARDS IDENTIFICATION**

**GHS Signal Word:** None  
**GHS Hazard Phrases:** No phrases apply.  
**GHS Precaution Phrases:** No phrases apply.  
**GHS Response Phrases:** No phrases apply.  
**GHS Storage and Disposal Phrases:** No phrases apply.  
**Additional Hazards Information:** This product is regulated as a cosmetic product and is labeled in accordance with the US Food and Drug Administration regulations which take precedence over OSHA Hazard Communication labeling.

**Hazard Rating System:**



**Potential Health Effects (Acute and Chronic):** This material is safe for users under normal and reasonably foreseeable use. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product.

Hazards not otherwise classified (HNOC) or not covered by GHS: None.

**Inhalation:** Not expected from normal use.  
**Skin Contact:** Not expected from normal use.  
**Eye Contact:** May cause slight eye irritation.  
**Ingestion:** Not expected from normal use.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #	Hazardous Components (Chemical Name)	Concentration
56-81-5	Glycerin	5.00 - 10.0 %
8001-54-5	Benzalkonium chloride	0.100 - 1.00 %
61789-40-0	Cocamidopropyl betaine	1.00 - 5.00 %



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# SAFETY DATA SHEET

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### 4. FIRST AID MEASURES

#### Emergency and First Aid Procedures:

- In Case of Inhalation:** Not expected to be a primary route of exposure. If breathed in, move person into fresh air.
- In Case of Skin Contact:** Rinse skin with water/shower. If skin irritation occurs, get medical advice/attention.
- In Case of Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. If eye irritation persists, get medical advice/attention.
- In Case of Ingestion:** Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical advice/attention.
- Note to Physician:** Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

- Flash Pt:** > 200 F (93.3 C) Method Used: Estimate
- Explosive Limits:** LEL: No data. UEL: No data.
- Autoignition Pt:** No data.
- Suitable Extinguishing Media:** Use water fog, CO2, or foam.
- Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool.
- Flammable Properties and Hazards:** No data available.

### 6. ACCIDENTAL RELEASE MEASURES

- Protective Precautions, Protective Equipment and Emergency Procedures:** Use proper personal protective equipment as indicated in Section 8.
- Steps To Be Taken In Case Material Is Released Or Spilled:** Ensure adequate ventilation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent further leakage or spillage if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Following product recovery, flush area with water.

### 7. HANDLING AND STORAGE

- Precautions To Be Taken in Handling:** Avoid contact with eyes. Avoid inhalation of vapor or mist.
- Precautions To Be Taken in Storing:** Keep container tightly closed in a dry and well-ventilated place. Store between 40F - 100F Protect containers against damage.
- Other Precautions:** Handle in accordance with good industrial hygiene and safety practices. Keep out of reach of children.



**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
56-81-5	Glycerin	PEL: 15 (dust); 5 (resp.) mg/m3	TLV: 10 mg/m3	No data.
8001-54-5	Benzalkonium chloride	No data.	No data.	No data.
61789-40-0	Cocamidopropyl betaine	No data.	No data.	No data.

**Respiratory Equipment (Specify Type):** Not required under normal conditions of use with adequate ventilation. If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Eye Protection:** Safety glasses with side shields.

**Protective Gloves:** Not required under normal use conditions.

**Other Protective Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Engineering Controls (Ventilation etc.):** Use a local or general, mechanical exhaust ventilation system capable of maintaining emissions in the work area, below the OSHA-PEL or ACGIH-TLV. Facilities storing or utilizing this material should be equipped with an eyewash facility, and a safety shower is recommended.

**Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical States:** [ ] Gas [X] Liquid [ ] Solid

**Appearance and Odor:** Appearance: Clear. Aqueous. Solution.  
Odor: Mild.

**Melting Point:** NA

**Boiling Point:** 212 F (100 C)

**Autoignition Pt:** No data.

**Flash Pt:** > 200 F (93.3 C) Method Used: Estimate

**Explosive Limits:** LEL: No data. UEL: No data.

**Specific Gravity (Water = 1):** 0.91

**Density:** NA

**Vapor Pressure (vs. Air or mm Hg):** NA

**Vapor Density (vs. Air = 1):** NA

**Evaporation Rate:** NA

**Solubility in Water:** Soluble

**Saturated Vapor Concentration:** NA

**Viscosity:** NA

**pH:** 5.3-5.7 - +/- 1

**Percent Volatile:** No data.



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### 10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive at normal temperatures and pressures.

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability:** Excess heat, freezing temperatures,

This product may darken in color over time due to the active ingredient Benzalkonium Chloride, with no deleterious effect on the efficacy of the product so long as the product is used prior to the expiration date.

**Incompatibility - Materials To Avoid:** None known.

**Hazardous Decomposition or Byproducts:** None known.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions:** No data available.

### 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No information available.  
Teratogenicity: No information available.  
Reproductive Effects: No information available.  
Mutagenicity: No information available.  
Neurotoxicity: No information available.

Other Studies: CAS# 56-81-5:  
Acute toxicity, LD50, Oral, 12600 mg/kg.  
Acute toxicity, LD50, Dermal, Rabbit, 10 g/kg  
Acute toxicity, LC50, Inhalation, Rat, > 570 mg/m3.

**Irritation or Corrosion:** May cause slight eye irritation.

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. ECOLOGICAL INFORMATION

**General Ecological Information:** The product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices. Additional information is available from the address listed in Section 1 upon request.

**Results of PBT and vPvB assessment:** No data available.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.



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### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Observe all federal, state, and local environmental regulations.

### 14. TRANSPORT INFORMATION

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not regulated as a hazardous material.  
**DOT Hazard Class:**  
**UN/NA Number:**

### 15. REGULATORY INFORMATION

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
56-81-5	Glycerin	No	No	No
8001-54-5	Benzalkonium chloride	No	No	No
61789-40-0	Cocamidopropyl betaine	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
56-81-5	Glycerin	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No
8001-54-5	Benzalkonium chloride	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No
61789-40-0	Cocamidopropyl betaine	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No

### 16. OTHER INFORMATION

**Revision Date:** 06/04/2016

**Preparer Name:** Crystal Maira

**Additional Information:** 6/4/2016 Routine review and updates to section 8,10,11

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