MATERIAL SAFETY DATA SHEET  
MSDS L-160            REVISION 4

MANUFACTURED BY;     DISTRIBUTED BY;
TECHNICAL CONCEPTS     TECHNICAL AND ADMINISTRATIVE CENTER
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SUBSTANCE IDENTIFICATION

SUBSTANCE: LIQUID ANTIMICROBIAL SOAP

TRADE NAMES/SYNONYMS: LIQUID DIAL FOR SENSITIVE SKIN, CMD; EXTRA MILD LIQUID DIAL

CHEMICAL FAMILY: Mixture

I.D. NUMBERS: 901736

| NFPA RATINGS (Scale 0-4, where 4=high degree of hazard): | HEALTH=1 | FLAMMABILITY=0 | REACTIVITY=0 |
| HMIS RATINGS (Scale 0-4, where 4=severe hazard): | HEALTH=1 | FLAMMABILITY=0 | REACTIVITY=0 |

This product is labeled in accordance with guidelines set forth in the Food, Drug, and Cosmetic Act. The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this Material Safety Data Sheet may differ from the requirements of the FD & C Act and as a result, this MSDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

HAZARDOUS INGREDIENT INFORMATION

| COMPONENT: COCAMIDOPROPYL BETAINIE | CAS# 61789-40-0 |
| COMPONENT: C_{8-10} & C_{10-16} POLYGLYCOSIDES (DECYL POLYGLUCOSE) | CAS# 66515-73-1 & 110615-47-9 (mixture) |
| COMPONENT: LAURAMIDE DEA | CAS# 120-40-1 |
| COMPONENT: SODIUM LAURETH SULFATE | CAS# 9004-82-4 |

OCCUPATIONAL EXPOSURE LIMITS: None established by OSHA, ACGIH, or NIOSH.

Carcinogen status of components: Not listed as carcinogenic by NTP, IARC, or OSHA.

PHYSICAL AND CHEMICAL DATA

DESCRIPTION: Clear liquid with a pleasant fragrance.

SPECIFIC GRAVITY: 1.018
pH (as is): 5.8 - 6.6 @ 25°C

VISCONSITY: 3000 - 6000 cps @ 25°C
SOLUBILITY: Complete.
FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD - The fire hazard for this product has not been determined. The hazard(s) of the component(s) with the most severe hazard(s) are:

Slight fire hazard when exposed to heat or flame.

FIRE FIGHTING MEDIA - Dry chemical, carbon dioxide, water spray or regular foam. For larger fires, use water spray, fog or regular foam.

FIRE FIGHTING - Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Extinguish only if flow can be stopped; use flooding amounts of water as a fog, solid streams may be ineffective. Avoid breathing vapors, keep upwind.

HEALTH HAZARD DATA

NOTE: The acute health effects described below are those which could potentially occur for the finished product. They are based on the toxicology information available for the finished product and/or each hazardous ingredient, and are consistent with the product type and the likelihood of a specific route of exposure. Known chronic health effects related to exposure to a specific ingredient are indicated.

ACUTE HEALTH EFFECTS:

INHALATION: Unlikely to occur due to the physical properties of the product.

SKIN CONTACT: Repeated or prolonged excessive contact may cause irritation.

EYE CONTACT: May cause irritation.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

CHRONIC HEALTH EFFECTS:

Due to the nature and composition of this product, no subchronic/chronic health effects are anticipated. Nonetheless, the following effects have been reported for one of the product’s components:

This product may contain greater than 0.1% DEA. The National Toxicology Program has concluded that there is clear evidence of liver tumor and some evidence of kidney tumor in mice dermally exposed for their lifetime to diethanolamine.

The significance of these findings and their relevance to humans is not clear. Diethanolamine is not genotoxic (neither mutagenic or clastogenic) and did not induce tumors in rats or in transgenic mice similarly treated. Additional research to better understand these findings and their relevance to humans, if any, is underway. Normal use of this product is not expected to produce these effects.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE: Pre-existing skin conditions.
EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Immediately remove from exposure area to fresh air. Keep affected person warm and at rest. Treat symptomatically and supportively. Contact physician or local poison control center. If breathing has stopped, give artificial respiration, and get medical attention immediately.

SKIN CONTACT: Rinse affected area with plenty of water until no evidence of product remains. Get medical attention if irritation persists.

EYE CONTACT: Immediately rinse eyes with plenty of water, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persists.

INGESTION: Treat symptomatically and supportively. Maintain airway and respiration. If vomiting occurs, keep head below hips to prevent aspiration. Dilution by rinsing the mouth and giving water or milk to drink is generally recommended. If unconscious, the victim should not be given anything to drink. Contact physician or local poison control center.

REACTIVITY

REACTIVITY - Stable under normal temperatures and pressures.

INCOMPATIBILITIES: Strong oxidizers, acids.

DECOMPOSITION - Thermal decomposition may release toxic and/or hazardous gases, including carbon monoxide, carbon dioxide, or oxides of sulfur.

POLYMERIZATION - Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

STORAGE AND DISPOSAL

Store away from incompatible substances. Observe all federal, state and local regulations when storing or disposing of this substance.

CONDITIONS TO AVOID

Avoid contact with incompatible substances and excessive heat.

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL - Stop leak if you can do it without risk. For small spills, take up with sand or other absorbent material and place into containers for later disposal. For larger spills, dike far ahead of spill for later disposal. Keep unnecessary people away; isolate hazard area and restrict entry.

OCCUPATIONAL PROTECTIVE EQUIPMENT

VENTILATION - Provide general exhaust ventilation system.

RESPIRATOR - If respiratory protection is required, it must be based on the contamination levels found in the workplace, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA).

FOR FIRE FIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS - Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other
positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

CLOTHING - Protective clothing is required where repeated or prolonged skin contact may occur.

GLOVES - Chemical-resistant gloves are required where repeated or prolonged skin contact may occur.

EYE PROTECTION - Safety glasses are required to prevent eye contact where splashing of product may occur.

**REGULATORY INFORMATION**

**DOT FLAMMABILITY CLASSIFICATION:** Not applicable.

**EPA - SARA TITLE III SECTION 313:** Toxic chemical - None.

**TSCA:** All components of this product are listed or are exempted or excluded from listing on the U.S. Toxic Substances Control Act (TSCA) chemical substance inventory.

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, The Dial Corporation makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, The Dial Corporation will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either expressed or implied of merchantability, fitness for a particular purpose or of any other nature is made hereunder with respect to the information set forth herein or to the product to which the information refers.

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**MSDS CREATION DATE:** 05/20/96  
**SUPERSEDES:** 06/15/98, Rev. 3  
**REVISION DATE:** 04/19/04  
**REVISION:** Update Flammability Hazard Data Section and I. D. number.