JUL 05 1994

MATERIAL SAFETY DATA SHEET COMPLIES WITH OSHA HCS 29 CFR 1910.1200 AND OSHA 174

MSDS# A-101 Revision # 6

PRODUCT NAME (AS USED ON LABEL): HOUSEHOLD AMMONIA ALTERNATE PRODUCT NAME: VARIOUS BRANDED AND PRIVATE LABEL NAMES (Clear, Clear Blue, Lemon, Sudsy) **EMERGENCY TELEPHONE NUMBER: (602) 253-3334** SECTION I THE DIAL CORP MANUFACTURER/DISTRIBUTOR: 1850 N. CENTRAL PHOENIX, AZ 85077 TELEPHONE NUMBER FOR GENERAL INFORMATION: (602) 991-3000 SECTION II-HAZARDOUS INGREDIENTS ACGIH (TLV)-N/A Finished Product: OSHA (PEL)-N/A Hazardous Components: Other Limits TLY Chemical/Common Name CAS Number PEL NIOSH Ceiling-5 min. 35 ppm* STEL 25 PPM* TWA 7664-41-7 mmonia (AS NH₂) 50 ppm* 35 ppm* STEL *(Ammonia Gas) SECTION III-PHYSICAL/CHEMICAL CHARACTERISTICS Melting Point: N/A Boiling Point: 191-212°F Freezing Point: N/A Vapor Density (Air=1): N/A pH: 11.8 Specific Gravity (Water=1): 0.9890 Evaporation Rate (*=1): Vapor Pressure (mm Hg.): N/A Greater than 1 Volatiles by Weight (%): 98.1 *Butyl Acetate Solubility in Water: Complete Appearance/Odor: Clear, cloudy white or colored liquid with distinct ammonia odor. ************************** SECTION IV-FIRE AND EXPLOSION HAZARD DATA Flash Point (°F)/Method Used: Non-flammable Flammable Limits (LEL/UEL): LEL=16% AS NH₂/UEL=27% AS NH₂ Extinguishing Media: Dry chemical, carbon dioxide, water spray or foam. Special Fire Fighting Procedures: If possible, move product from fire area. Cool fire-exposed containers with water spray. Unusual Fire and Explosion Hazards: Negligible fire and explosion hazard; however, if ammonia gas is evolved, it is flammable.

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SECTION V-REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Heat

Chemical Incompatibility: Chlorine, bromine, iodine, hypochlorite, mineral acids. Violent reactions may occur with incompatible materials, releasing irritating or toxic gases.

Hazardous Decomposition Products: Toxic oxides of nitrogen and ammonia gas.

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: None

SECTION VI-HEALTH HAZARD DATA

Route of Entry: Inhalation-Likely Skin-Likely Ingestion-Unlikely under normal use conditions

Health Hazards (Acute and Chronic): (Acute)-Based on the testing of this product in animals, it is both an eye and skin irritant (rabbit) and toxic by ingestion (rat). (Chronic)-Not determined on this product.

Carcinogenicity*: NTP IARC Monographs OSHA Regulated

N/A N/A N/A

*Not determined for finished product or Ammonia (NH₃), the hazardous component, in the product.

- Effects of Overexposure: The following discussion is based primarily on the fact that ammonia (AS NH₃) is the hazardous ingredient in the finished product. The effects described represent the "worst case" scenario for the finished product.
 - Inhalation Mild exposure to ammonia vapors may cause irritation of the nose, throat, coughing and sneezing. A more severe exposure may cause respiratory irritation, dyspnea, pulmonary edema. Repeated or prolonged exposure to vapors may cause, in addition to irritation, bronchitis and pneumonia.
 - Ingestion If ingested, may cause excessive salivation, nausea, vomiting, gastric irritation with chances of perforation. Ingestion of large quantities, may produce CNS depression, shock and convulsions.
 - Skin Powerful irritant, may cause severe burning pain and corrosive damage.

 Repeated or prolonged exposure may cause dermatitis.
 - Eyes Powerful irritant, may cause conjunctivitis, swelling of eyelids, chemical burns, transient corneal damage. Repeated or prolonged exposure may cause, in addition to irritation, cataracts and retinal atrophy.

Medical Conditions Generally Aggravated By Exposure: None known.

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SECTION VII-PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Eye Protection - Avoid eye contact. Wear protective safety goggles or face shield. Skin Protection - Avoid prolonged or repeated skin contact. Wear protective gloves. Respiratory Protection - Keep upwind of spill. Avoid breathing vapors. Use NIOSH approved respirator that will provide protection from ammonia gas. If ammonia vapors are greater than 300 ppm use self-contained breathing apparatus with full

Handling: Do not mix with other household chemicals, such as bleach, automatic toilet bowl cleaner, wall or tile cleaners.

Storage: Store in cool, ventilated area. Keep out of direct sunlight. Avoid overheating. Plastic bottle will bulge from ammonia vapor pressure.

Normal Clean Up: Ventilate area. Flush away spilled product with water when vapors

Waste Disposal: Dilute with water and flush to sewer in accordance with federal, state and local environmental regulations.

Other Precautions: None

SECTION VIII-FIRST AID & MEDICAL EMERGENCY PROCEDURES

Eyes: Immediately flush eyes with running water for at least 15 minutes. Get prompt medical attention.

Skin: Rinse well with running water. If irritation persists, contact physician or

local poison control center.

Inhalation: If effects occur, remove victim to fresh air. Provide symptomatic and supportive care. Contact physician or local poison control center.

Ingestion: Immediately give large quantities of water or milk to dilute. Do not

induce vomiting. Get prompt medical attention.

SECTION IX-CONTROL MEASURES-OCCUPATIONAL

Respiratory Protection (Specify Type): See Section VII above.

Ventilation:

Use local exhaust system Mechanical (General)-N/A

Special-N/A

Protective Gloves: See Section VII above Eye Protection: See Section VII above

Other Protective Clothing or Equipment: Uniforms, coveralls or labcoats

Work/Hygienic Practices: Provide eye bath and emergency shower. Launder work

clothing when soiled.

SECTION X-ENVIRONMENTAL IMPACT

Applicable Regulations: CPSC 16 CFR 1500

DOT/EPA Hazard Class: N/A Shipping Name: See product name ******************

**********	HOUSEHOLD AMMONIA (<i>A</i>	\-101) *********
EPA - SARA Title III Section 313: Toxic	chemical - no	
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NOTE: N/A=Not Applicable NIF=No Information Found	ND= Not Determined	NL=Not Listed NE=None Established
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Date Prepared: 04/24/92		

Change: Reviewed and Updated MSDS:

End of MSDS