Section 1 – Product & Company Identification

Product Name: Lemon NeutraQuat Disinfectant Cleaner

Product ID Number: 252L

Product Use: Disinfectant/Cleaner/Deodorizer Product Class: Quaternary Ammonium Compound

EPA Reg. Number: 6836-204-5747

Manufacturer: Arrow Chemical Products, Inc.

2067 Ste. Anne Detroit, MI 48216

313-237-0277 Telephone

24 hr. Emergency Assistance: Infotrac 1-800-535-5053 Numbers:

Section 2 – Composition/Information on Ingredients

INGREDIENT CAS# % by Weight **Exposure Limits** LC_{50}/LD_{50} Alkyl dimethyl ammonium chloride 7173-51-5 Not established See Section 11

Ethanol 64-17-5 <2 ACGIH TLV, OSHA PEL 1000 ppm (TWA) US, CANADA, MEXICO Acute Dermal: >2000 mg/kg (Rats)

Section 3 – Hazards Identification

Emergency Overview: May be irritating to: eyes, skin, gastrointestinal tract, and respiratory system.

Potential Health Effects:

Skin: Direct contact may cause skin irritation. Prolonged contact may cause skin burns.

Eves: Direct contact will produce severe irritation and/or burns.

Inhalation: Mists and vapors can irritate the throat and respiratory tract.

Ingestion: Can cause gastrointestinal irritation, swelling of the larynx, difficulty in breathing, circulatory shock, convulsions and/or convulsions.

Section 4 – First Aid Measures

Eyes: Immediately flush eyes with water for 15-20 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention at once.

Skin/Clothing: Wash with large amounts of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention.

Wash clothing and decontaminate shoes before reuse.

Inhalation: Remove from area to fresh air. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available. Get immediate medical attention.

Ingestion: Immediately give 3-4 glasses of milk (if unavailable, give water). Do NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Section 5 – Fire Fighting Measures

Flash Point: 230° F. – (closed cup)

Upper - Lower: Not applicable.

Extinguishing Media: Dry chemical, foam, carbon dioxide, water fog or any other agent suitable for surrounding fire.

Fire Fighting Equipment & Instructions: Firefighters should wear full protective clothing including self-contained breathing apparatus. Cool fire exposed containers with spray. Hazardous Combustion Products: Products of combustion are toxic.

Section 6 – Accidental Release Measures

Spill and Leak Procedures

CAUTION. Wear appropriate protective gear and respiratory protection where mist or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred). Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid to containers for recovery or disposal. Keep spill out of sewers and open bodies of water. WASTE DISPOSAL: In accordance with all Federal, state and local laws and regulations. Incineration is the preferred method.

Section 7 – Handling & Storage

Handling Procedures: Avoid contact with skin and eyes. Use good personal hygiene practices. Wash thoroughly after using with soap and water.

Storage Procedures: Keep container tightly closed and in a cool, well-ventilated place. Keep from freezing. Store at temperatures below 140° F. Do not contaminate drinking water, food or feed by storage or disposal.

Section 8 – Exposure Controls/Personal Protection

Engineering Controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment:

Eyes/Face: Wear chemical goggles. Use a face shield if splashing is possible.

Skin: Use rubber or neoprene gloves. Wear suitable protective clothing.

Respiratory: Not necessary unless exposure limits are exceeded, then use a NIOSH/MSNA approved respirator.

General: Eye wash fountain and emergency showers are recommended.

The following ingredients have established exposure guidelines:

INGREDIENT EXPOSURE GUIDELINE ACGIH TLV, OSHA PEL & NIOSH REL Ethanol (CAS# 64-17-5)

GUIDELINE VALUE

1000 PPM (TWA)

All TWAs are for an 8-hour period and all STELs are for 15 minutes unless specifically noted as being for another time period.

Section 9 – Physical & Chemical Properties

Specific Gravity: 1.00

Percent Volatiles: Not determined.

VOC Content: < 1

Evaporation Rate: Not determined.

pH: 7.5 - 8.5

Appearance and Odor: Yellow colored liquid, Lemon fragrance.

PREPARED BY: CINDY SCHROEDER, DIRECTOR OF RESEARCH

Date: 2-11-09

Acute Oral LD50: >1000 mg/kg (Rats)

PAGE 1 OF 2

Section 10: Stability & Reactivity

Chemical Stability: Stable Conditions to Avoid: Keep away from heat and oxidizing agents.

Incompatibilities: Strong oxidizing agents.

Hazardous Decomposition: Carbon monoxide, carbon dioxide and hydrogen chloride vapors.

Hazardous Polymerization: Will not occur.

Section 11 – Toxicological Information – (Didecyl dimethyl ammonium chloride)

Carcinogenicity: No Carcinogenicity data available for this product.

Acute Oral LD50: 1850 mg/kg (rat) Acute Dermal LD50: 4430 mg/kg (rabbit) Primary Skin: (rabbit) Non-irritant

Primary Eye: (rabbit) Essentially non-irritating.

CHEMICAL INGREDIENTS LISTED AS POTENTIAL OR KNOWN CARCINOGENS

INGREDIENT NTP IARC

No ingredients listed in this section.

Section 12 – Ecological Information

Ecotoxicity: No data available for this product. Environmental Fate: This product is biodegradable.

Section 13 – Disposal Considerations

Disposal Instructions: This substance, when discarded or disposed of, is a characteristic hazardous waste according to Federal regulation (40 CFR 261) and is assigned the EPA Hazardous Waste Number of D001. The discarding or disposal of this material must be done at a properly permitted facility in accordance with the regulations of 40 CFR 262, 263, 264, and 268. Additionally, the discarding or disposal of this material may be further regulated by state, regional, or local regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

The transportation, storage, treatment and disposal of this waste material must be conducted in compliance with all applicable Federal, state, and local regulations.

Section 14 – Transportation Information

DOT Hazard Class: Not regulated.

DOT Proper Shipping Name: Not regulated.

Section 15 – Regulatory Information TSCA Status

While all ingredients are listed on the TSCA Chemical Inventory, this product is regulated as a pesticide under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and not subject to the TSCA Inventory rules for FIFRA uses

Other Chemical Inventories

All components of this product are listed on the following inventories: Canada (DSL), China, and Philippines. One or more ingredients are not listed on the following inventories: Australia, Japan, European Union, Korea.

CERCLA/SARA

SARA Title III, Sections 311/312 - This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in the 40 CFR 370: Classification of this product: A Reportable ingredient CAS# 7173-51-5

SARA Title 313 - This act requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities, as listed in 40 CFR 372, are met or exceeded: CHEMICAL NAME CAS NO. MAXIMUM CONCENTRATION COMMENT

No ingredients listed in this section.

Reportable Quantities/Threshold Planning Quantities: CERCLA requires notification of the National Response Center (Telephone 1-800-424-8802) in the event of a release of quantities of the following hazardous materials contained in this product, if the release is equal to or greater than the Reportable Quantities (RQs). SARA 302/304 requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and/or release of Reportable Quantities.

CHEMICAL NAME REPORTABLE QUANTITY (RQ) THRESHOLD PLANNING QUANTITY (TPQ)

No ingredients listed in this section.

State & Provincial Right to Know & Selected Regulatory Lists

The following ingredients appear on various state right to know lists and/or California's Proposition 65 List

CHEMICAL NAME STATE LIST

AZ, CA, CAP65C, CT, IL, MA, MN, NJ, PA, RI Ethanol

AZ, CA, CT, ID, MA, MN, NJ, PA, RI

AZ - Arizona Ambient Air Quality Guidelines IL - Illinois Toxic Air Contaminant - Carcinogenic MA - Massachusetts Right to Know List CT - Connecticut Hazardous Air Pollutants

CA - California Director's List of Hazardous Substances MN – Minnesota Hazardous Substance List

CA65C - California Prop 65 Carcinogen NJ - New Jersey Right to Know List

CA65R - California Prop 65 Reproductive Toxin PA - Pennsylvania Right to Know List FL - Florida Substances List RI - Rhode Island Hazardous Substance List

ID - Idaho Non-carcinogen Toxic Air Pollutants

WHMIS Classification: Not available. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Hazard Ratings

Hazard Ratings

Ha	zard	Rating	Scale:

HEALTH 4 = Extreme**FLAMMABILITY** 3 = High2 = ModerateREACTIVITY

1 = Slight0 = Insignificant

Information Contact: Arrow Chemical Products, Inc., 2067 Ste. Anne, Detroit, MI 48216

The seller makes no warranty expressed or implied concerning the accuracy of any results to be obtained from the use of any information and no warranty expressed or implied concerning the use of the products. The buyer assumes all risks of the use and/or handling.