SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Arcot #9709M Refresh Quat Sanitizer, EPA Registration Number 10324-81
(including Max-Control Dispensing System #6709)

Manufacturer: Arcot Manufacturing Corporation, 2950 Mowery Road, Houston, Texas, U.S.A. 77045
Emergency Response Telephone: 1-800-633-8253 (Account #9390)
Arcot Customer Service Telephone: 713-413-9700
Website: www.ArcotManufacturing.com

Recommended Use: Sanitizer, disinfectant, virucide, food-contact sanitizer, bacteriostat
Restrictions On Use: This product is intended to be diluted prior to use. For further information refer to the EPA Registered product label. Uses other than those identified are not recommended.

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):
Hazard Classification, Concentrate:
- Serious eye damage/eye irritation – Category 1 (Serious eye damage)
- Skin corrosion/irritation - Category 1B
- Acute toxicity, oral – Category 4
- Acute toxicity, dermal – Category 4

Hazard Classification, At Use-Dilution:
- Serious eye damage/eye irritation – Category 2B (Mild Irritant according to GHS Classification 3.2.4)

Signal Word: DANGER!

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Listed below is the hazard information as required on the pesticide label:

Signal word: DANGER. KEEP OUT OF REACH OF CHILDREN.

Hazard statement: Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed, inhaled, or absorbed through the skin.

Hazard Statements:
- H302: Harmful if swallowed
- H312: Harmful in contact with skin
- H314: Causes severe skin burns and eye damage
Precautionary statements: Causes severe skin burns and serious eye damage. Harmful if swallowed.

Prevention:
P260: Do not breathe mist, vapors or spray.
P262: Do not get in eyes, on skin, or on clothing
P264: Wash affected areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use in a well-ventilated area.
P280: Wear protective gloves, protective clothing, and eye/face protection.

Response:
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
P303 + P361 + P353 + P363: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P321: Specific treatment (see supplemental first aid instructions on the label.)
In case of fire: Use appropriate media to extinguish. See Section 5.

Storage/Disposal:
P233: Keep container tightly closed.
P234: Keep only in original container.
P210: Keep away from heat.
P273: Avoid release to the environment.
P405: Store locked up.
P501: Dispose of content and container to an approved waste disposal plant in accordance with local, regional, national, and/or international regulations.
Store in a well-ventilated place. Keep cool. Store away from children and untrained personnel.

Safety Phrases:
S36: Wear suitable protective clothing.
S37: Wear suitable gloves.
S39: Wear eye/face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Product at use dilution requires only irritant pictogram. Causes mild eye irritation.

Signal Word: WARNING
Hazard Statements: H320: Causes eye irritation
Precautionary Statements:
Prevention: P264: Wash affected areas thoroughly after handling.
Response: P305+P351+P338+P337+P313: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS
<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl (C12-16) dimethylbenzyl ammonium chloride</td>
<td>68424-85-1</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Octyl decyl dimethyl ammonium chloride</td>
<td>32426-11-2</td>
<td>&lt; 3%</td>
</tr>
<tr>
<td>Dioctyl dimethyl ammonium chloride</td>
<td>5538-94-3</td>
<td>&lt; 2%</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>&lt; 2%</td>
</tr>
<tr>
<td><strong>Other components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other components are below reportable levels and/or are not classified.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Product At Use-Dilution:** Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

### 4. FIRST-AID MEASURES

#### 4.1 Description of first-aid measures

**General advice:** Show this material safety data sheet to medical personnel. Do not leave affected person unattended. Isolate exposed apparel for laundry before re-use.

**Eye contact:** Rinse eyes with water. Remove any contact lenses, and continue flushing with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.

**Skin contact:** Take off contaminated clothing and shoes immediately. Wash affected areas with plenty of water. Seek medical attention if irritation develops or persists.

**Ingestion:** Do NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Rinse mouth with water. Seek medical attention.

**If inhaled:** Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

**Product At Use-Dilution**

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

**Skin contact:** No known effect after skin contact. Rinse with water for a few minutes.

**Ingestion:** Get medical attention if symptoms occur.

**If inhaled:** No special measures required. Treat symptomatically.

#### 4.2 Most important symptoms and effects, both acute and delayed

**Risks:** The most important known symptoms and effects are described in the labeling (section 2.2) and/or in section 11. Corrosive effects. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could result. Prolonged or repeated skin contact may aggravate existing skin conditions. Inhalation of mists may aggravate existing chronic respiratory conditions such as asthma, emphysema or bronchitis.

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Note to physician:** All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Flash Point and Method:** None
5.1 Extinguishing media
Suitable extinguishing media: The product is not flammable. Use media suitable for the material that is burning.
Unsuitable extinguishing media: No data available

5.2 Special hazards arising from the substance or mixture
Special hazards during fire-fighting: Container may rupture on heating
On combustion or on thermal decomposition: May include carbon oxides, nitrogen oxides

5.3 Advice for firefighters
Special protective equipment for firefighters: As in any fire, wear NIOSH/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.
Specific firefighting methods: No special methods required. Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side. Contain the extinguishing fluids by diking.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Spill area may be slippery. Wear appropriate protective equipment (See Section 8).

6.2 Environmental precautions
Avoid contact of spilled material and runoff with soil and surface waterways

6.3 Methods and material for containment and cleaning up
Recovery: Stop leak if safe to do so. Absorb spills with vermiculite, fuller’s earth, or sand. Shovel up and place in a nonmetal waste container for disposal. Dike large spills with soil or sandbags to contain it and prevent its spread. Keep in suitable, properly labeled, closed containers for disposal.
Decontamination/Cleaning: Wash non-recoverable remainder with large amounts of water. Clean contaminated surfaces thoroughly. Recover the cleaning water for subsequent disposal.
Disposal: Dispose of in accordance with local regulations
Additional Advice: Spill area may be slippery

| Product At Use-Dilution | Use a water rinse for final clean-up |

6.4 Reference to other sections
No information available

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Technical measures: Does not require any specific or particular measures
Advice on safe handling and usage: Wear appropriate protective equipment including long chemical resistant gloves, chemical splash goggles and protective footwear. Handle in accordance with good industrial hygiene and safety practice. Do not spray toward face. Wash affected areas after use. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.
Product At Use-Dilution  Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

7.2  Conditions for safe storage, including any incompatibilities

| Technical measures for storage: Does not require any specific or particular measures |
| Storage class (TRGS 510): Non-combustible, corrosive materials |

Storage conditions

Recommended: Keep container tightly closed. Opened containers must be carefully resealed and kept upright to prevent leakage.

Incompatible products: Hazardous reactions may occur on contact with certain chemicals. Refer to the list of incompatible materials section 10: “Incompatible materials”

Product At Use-Dilution  Keep out of reach of children. Keep container tightly closed.

7.3  Specific end use(s)

No information available

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Introductory remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1  Control parameters

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Control Parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Reportable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2  Exposure controls

Control measures

Engineering measures: Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

Personal protective equipment

Respiratory protection: In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.

Hand protection: Wear long chemical resistant gloves. Observe instructions regarding permeability and breakthrough time provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Wear chemical splash goggles.

Skin and body protection: Wear footwear protecting against chemicals, and impervious clothing. Choose body protection according to the amount and concentration of the substances in the workplace.
Hygiene measures: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
3) Wash exposed skin promptly to remove accidental splashes or contact with material.

Protective measures: Ensure that eyewash stations and safety showers are close to the workstation location, and that emergency equipment is immediately accessible with instructions for use. The protective equipment must be selected in accordance with current local standards and in following proper use instructions from the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

Product at Use-Dilution

- Respiratory protection: A respirator is not needed under normal and intended conditions of product use.
- Hand protection: No protective equipment is needed under normal use conditions.
- Eye protection: No protective equipment is needed under normal use conditions.
- Skin and body protection: No protective equipment is needed under normal use conditions.
- Hygiene measures: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
3) Wash exposed skin promptly to remove accidental splashes or contact with product.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Form: liquid
- Odor: slight
- Odor Threshold: No data available
- pH: 5-8
- Freezing point: No data available
- Initial boiling point: > 212°F
- Flash point: Does not flash
- Evaporation rate: No data available
- Flammability (solid, gas): No data available
- Upper/lower flammability or explosive limits: No data available
- Vapor pressure: No data available
- Vapor density: No data available
- Relative density: approximately 1 g/mL (8.3 Lb./Gal.) at 25°C (77°F)
- Water solubility: completely soluble
- Partition coefficient (n-octanol/water): No data available
- Auto-ignition temperature: No data available
- Decomposition temperature: No data available
- Viscosity: No data available
10. STABILITY AND REACTIVITY

10.1 Reactivity
No information available

10.2 Chemical stability
Stable and non-reactive under normal conditions of use, storage and transport

10.3 Possibility of hazardous reactions
No information available

10.4 Conditions to avoid
No information available

10.5 Incompatible materials
Anionic surfactants

10.6 Hazardous decomposition products
Oxides of carbon and nitrogen

11. TOXICOLOGICAL INFORMATION

Product Summary:
Causes severe skin burns and serious eye damage. Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly digestive tract. Vapors and spray mist may irritate throat and respiratory system and cause coughing.
No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

Information on likely routes of exposure:
Eye Contact Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.
Skin Contact Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed).
Ingestion Harmful is swallowed. Causes burns/serious damage to mouth, throat and stomach. Symptoms may include vomiting, nausea, and/or feeling of general unwellness.
Inhalation May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.
Sensitization No known effects

Product at Use-dilution
Product Summary:
Causes eye irritation.
No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

Information on likely routes of exposure:
### 11.1 Information on toxicological effects

**Acute toxicity**  
Acute oral: LD₅₀ 344-366 mg/kg  
Acute dermal: LD₅₀ 1500-3340 mg/kg  
Acute inhalation: No information available  
Acute toxicity (other): No information available

**Skin corrosion/irritation**  
Skin irritation: Corrosive. Causes severe burns

**Serious eye damage/eye irritation**  
Eye irritation: Corrosive. Causes serious eye damage

**Respiratory or skin sensitization**  
Sensitization: Not classified as sensitizing by skin contact

#### Product at Use-dilution

**Acute toxicity**  
Acute oral: LD₅₀ >5000 mg/kg  
Acute dermal: LD₅₀ >2000 mg/kg  
Acute inhalation: No information available  
Acute toxicity (other): No information available

**Skin corrosion/irritation**  
Skin irritation: No known significant effects or critical hazards

**Serious eye damage/eye irritation**  
Eye irritation: Causes eye irritation

**Respiratory or skin sensitization**  
Sensitization: Not classified as sensitizing by skin contact

**Mutagenicity**  
Genotoxicity in vitro: No information available  
Genotoxicity in vivo: No information available

**Carcinogenicity**  
Carcinogenicity: This product does not contain any ingredient designated as probable or suspected human carcinogens by IARC, ACGIH

**Toxicity for reproduction and development**  
Toxicity to reproduction/fertility: No information available
Developmental toxicity/teratogenicity: No information available

**Specific Target Organ Toxicity (STOT)**
STOT-single exposure: No information available  
STOT-repeated exposure: No information available

**Aspiration toxicity**
Aspiration toxicity: No information available

**Other Hazards**
No information available

### 12. ECOLOGICAL INFORMATION

12.1 **Toxicity**  
Aquatic toxicity: Toxic to aquatic life

12.2 **Persistence and degradability**  
Biodegradation: No information available

12.3 **Bioaccumulative potential**  
Partition coefficient: n-octanol/water: No bioaccumulation is to be expected (log Pow<=4)  
Bioconcentration factor (BCF): No information available

12.4 **Mobility in soil**  
Known distribution to environmental compartments: No information available

12.5 **Results of PBT and vPvB assessment**  
No information available

12.6 **Other adverse effects**  
Environmental assessment: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

### 13. DISPOSAL CONSIDERATIONS

13.1 **Waste treatment methods**

**PESTICIDE DISPOSAL**: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental control agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.  
**Product Disposal**: Observe all applicable federal, state, and local regulations  
**Packaging**: Remove all residue when emptying

**Product At Use-Dilution**

**Waste treatment methods**

**PESTICIDE DISPOSAL**: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or
Environmental control agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Product Disposal: Diluted product can be flushed to sanitary sewer
Packaging: Discard empty container in trash or offer for recycling

14. TRANSPORT INFORMATION

DOT (US):
For <1.3 gallon containers, this product is considered as “Limited Quantity” and is not regulated by DOT.
For >1.3 gallon containers: UN1903, Disinfectants, liquid, corrosive n.o.s. (Quaternary Ammonium Compound), 8, PGIII.

Reportable Quantity (RQ): N.A.
Poison Inhalation Hazard: No
Ground transport only. Do not ship via air.

Product At Use-Dilution: DOT Hazard Classification: Not applicable

15. REGULATORY INFORMATION

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

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. See section 2 of this SDS.

SARA 302 Components (Extremely Hazardous Substances): This product and its ingredients are not subject to the reporting requirements of SARA Title III, Section 302.
SARA 304 Emergency release notification: Not regulated.
SARA 313 Components: Not listed
SARA 311/312 Hazards: Acute (Immediate) Health Hazard.
CERCLA Hazardous Substance List (40 CFR 302.4): Not listed

16. OTHER INFORMATION

HMIS & NFPA Ratings:

<table>
<thead>
<tr>
<th>Concentrate</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Use-Dilution</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Health = 3 (High)  Fire = 0 (Insignificant)  Reactivity = 0 (Insignificant)
HMIS & NFPA ratings involve data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

**Abbreviations:**
- ACGIH = American Conference of Governmental Industrial Hygienists
- CAS = Chemical Abstract Service
- EPA = Environmental Protection Agency
- FIFRA = Federal Insecticide, Fungicide & Rodenticide Act (administered by EPA)
- GHS = Globally Harmonized System
- HCS = Hazard Communication Standard
- HMIS = Hazardous Materials Identification System
- LC = Lethal Concentration
- LD = Lethal Dose
- NFPA = National Fire Protection Association
- NIOSH = National Institute for Occupational Safety & Health
- NOEC = No Observed Effect Concentration = the highest concentration of the toxicant tested which has no effect on the organisms exposed to it
- NOEL = No Observed Effect Level
- OSHA = Occupational Safety and Health Administration
- PEL = Permissible Exposure Limit
- RTECS = Registry of Toxic Effects of Chemical Substances
- STEL = Short Term Exposure Limit (based on 15-minute exposures)
- TC = Toxic Concentration
- TLV = Threshold Limit Values
- TWA = Time Weighted Average limit or ceilings (C) (exposure limit) (based on 8 hour/day, 40 hour/week exposures)

**DISCLAIMER:** The information contained herein is based upon data obtained from sources believed to be reliable and reflects our best professional judgment. Since it is impossible to anticipate all of the conditions under which our products may be used, we do not guarantee that the recommendations will be adequate for all individuals and situations. Each user of this product should determine the suitability of the product for his or her particular purpose and should comply with all federal, state and local regulations. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. We shall not be held liable for any damage resulting from handling or from contact with the above product or from improper use of our products. We do not provide any warranties, expressed or implied, and do not assume any responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. We update SDS and labels on a regular basis. Please do not hesitate to contact us for current information.

Revision Date: March 17, 2020