PRODUCT
Bac2Clean Disinfectant Concentrate

NFPA HAZARD RATINGS*

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 High health hazard</td>
<td>0 Noncombustible</td>
<td>0 Stable</td>
</tr>
</tbody>
</table>

SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Bacteriostat concentrate
Registrations: EPA Reg. No. 10324-80-787 EPA Est. No. 49614-MO-1

SECTION 2: HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>%</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>LD 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octyl decyl dimethyl ammonium chloride</td>
<td>1-3</td>
<td>68424-85-1</td>
<td>None listed</td>
<td>Oral: 272 mg/kg (rat)</td>
</tr>
<tr>
<td>Dodecyl dimethyl ammonium chloride</td>
<td>.5-1.5</td>
<td>5538-94-3</td>
<td>None listed</td>
<td>Dermal: &gt;2 g/kg</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td>.5-1.5</td>
<td>7173-51-5</td>
<td>None listed</td>
<td></td>
</tr>
<tr>
<td>Ethanol</td>
<td>&lt;1</td>
<td>64-17-5</td>
<td>100 ppm TWA</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3: PHYSICAL DATA

Appearance: Clear, colorless to straw colored liquid
Odor: Benzaldehyde (organic) odor
Viscosity: 21.72 cs @24°C
pH: 11-13
Specific Gravity (23°C): 1.01
Vapor Pressure (mm Hg): Not determined

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): >201
Extinguishing Media: Dry chemical, foam, carbon dioxide or water fog. Solid water streams may spread burning liquid.
Special Fire Fighting Procedures: Firefighters should wear full protective clothing including self-contained breathing apparatus. Cool fire exposed containers with water.

SECTION 5: REACTIVITY DATA

Stability: Stable
Incompatibility (materials to avoid): Strong oxidizing agents (may result in fire), reducing agents
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide and toxic hydrogen chloride vapors

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): High
Effects of Overexposure:
Acute: Causes corrosive burns to skin. Brief exposures may cause irritation and defatting of the skin. Exposures not promptly washed off may lead to toxic effects similar to ingestion. Harmful if absorbed through skin. Causes burns in eyes and may result in permanent injury to eyes including blindness. Mists and vapors can irritate the throat and respiratory tract. High vapor concentrations may cause central nervous system effects. Symptoms may include headaches, dizziness, and drowsiness. Harmful if inhaled. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea and possibly death. Harmful if swallowed.
Chronic: Ingestion of ethanol by pregnant women can cause reproductive toxicity to the fetus.

State & Provincial Right to Know & Selected Regulatory Lists

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>State List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl Chloride (trace impurity &lt;10 ppm)</td>
<td>AZ, CA, CAP65C, FL, IL, MA, MN, NJ, PA</td>
</tr>
<tr>
<td>Ethanol</td>
<td>AZ, CA, CT, FL, ID, MA, MN, NJ, PA, RI</td>
</tr>
<tr>
<td>AZ - Arizona Ambient Air Quality Guidelines</td>
<td>IL - Illinois Toxic Air Contaminant - Carcinogenic</td>
</tr>
<tr>
<td>CT - Connecticut Hazardous Air Pollutants</td>
<td>MA - Massachusetts Right to Know List</td>
</tr>
<tr>
<td>CA - California Director's List of Hazardous Substances</td>
<td>MN - Minnesota Hazardous Substances List</td>
</tr>
<tr>
<td>CAP65C - California Prop 65 Carcinogen</td>
<td>NJ - New Jersey Right to Know List</td>
</tr>
<tr>
<td>FL - Florida Substances List</td>
<td>PA - Pennsylvania Right to Know List</td>
</tr>
<tr>
<td>ID - Idaho Non-carcinogen Toxic Air Pollutants</td>
<td>RI - Rhode Island Hazardous Substances List</td>
</tr>
</tbody>
</table>

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO’s knowledge. No guarantee or liability is expressed or implied.
### SECTION 7: PREVENTATIVE MEASURES

**SPECIAL PROTECTION INFORMATION**

**Respiratory Protection:** If exposure limits are exceeded or if irritation is experienced, an organic-vapor removing cartridge with a pre-filter (MSHA/NIOSH approved) protection should be worn. Respiratory protection may be needed for non-routine or emergency situations.

**Ventilation:** Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposures.

**Protective Gloves:** Use impervious gloves (rubber or neoprene). Wear suitable protective clothing.

**Eye Protection:** Wear chemical goggles. Use a face shield if splashing is possible.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

**STORAGE AND HANDLING:**

Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Keep the container tightly closed and in a cool, well-ventilated area. Keep from freezing. Do not handle or store near an open flame, heat or other ignition sources. Prevent electrostatic charge buildup by using common bonding and grounding methods.

**SPILL OR LEAK PROCEDURES:**

Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas where vapors may accumulate. Eliminate all ignition sources. Ventilate closed spaces before entering. All equipment used when handling the product must be grounded. Floor will be slippery. Do not touch or walk through spilled material. Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. For large spills: Dike far ahead of liquid spill for later disposal. Use a vapor suppressive foam. Do not treat this material with water. Water may not prevent ignition in closed spaces.

**WASTE DISPOSAL METHOD:**

Although not considered a hazardous waste, the discarding of disposal of this material must be done in 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.

**RECOMMENDED PRECAUTIONARY LABELING:**

**CAUTION:** Avoid contact with skin and eyes. Keep container tightly closed and in a cool, well-ventilated area. Keep from freezing. Do not handle or store near an open flame, heat or other sources of ignition.

**FIRST AID:**

- Remove person overcome by vapors to fresh air. Give artificial respiration if necessary. Immediately flush eyes with water for 15-20 minutes. If ingested, have person sip glass of water if able to swallow. Do not induce vomiting. Call poison control center or doctor for further treatment advice.

**KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.**

This product is intended for professional use only by trained personnel.

### SECTION 8: FIRST AID

**Inhalation:** If symptoms are experienced, move victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**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:** Take off contaminated clothing. Rinse skin immediately with water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting told to so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

### SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

### SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner

Date: February 11, 2011

Replaces MSDS of: December 30, 2010