1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Eclipse Aurora HB Germicidal Detergent and Deodorant
Recommended Use: Germicidal cleaner
Concentrate - dilute prior to use.
Product intended for commercial and industrial use only.
Uses Advised Against: Other than per labelled instructions
EPA Registration Number: 1839-95-41567

Manufacturer Address:
Amano Pioneer Eclipse Corporation
P.O. Box 909
1 Eclipse Road
Sparta, NC 28675
Telephone: 1-336-372-8080
Email: msds@pioneer-eclipse.com
Internet: www.pioneereclipse.com

FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure or Accident. Call CHEMTREC Day or Night.
Within USA and Canada 1-800-424-9300. Outside USA and Canada 1-703-527-3887 (collect calls accepted)

2: HAZARDS IDENTIFICATION

Classification: Skin Corrosion - Category 1B
Eye Damage - Category 1

Signal Word: DANGER

Pictogram:

Hazard Statements:
Causes severe skin burns and eye damage.
Causes serious eye damage.

Precautionary Statements:
Do not breathe mist/vapours/spray.
Wash thoroughly after handling.
Wear protective gloves and eye protection.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician if you feel unwell.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container according to local, regional and national regulations.

Other Hazards: None known

Supplemental Information: None known

3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Weight % *</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-alkyl dimethyl benzyl ammonium chloride</td>
<td>68391-01-5</td>
<td>2.25</td>
</tr>
<tr>
<td>n-alkyl dimethyl ethylbenzyl ammonium chloride</td>
<td>68956-79-6</td>
<td>2.25</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>497-19-8</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

* Exact concentration of the ingredients has been withheld as a trade secret.

4: FIRST AID MEASURES
DECRIPITION OF FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eye with plenty of water for at least 15 minutes. (If easy to do, remove contact lenses, if worn). Seek medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.

Inhalation: If breathing is difficult. Remove subject to fresh air. Seek medical attention immediately.

Ingestion: Call a physician or poison control center. Do not induce vomiting. Seek medical advice immediately.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye Contact: Causes eye burns.

Skin Contact: Causes skin burns.

Inhalation: Harmful if inhaled. May cause irritation and corrosive effects to nose, throat and respiratory tract.

Ingestion: Harmful if swallowed. May cause burns to mouth, throat and stomach.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

5: FIRE-FIGHTING MEASURES

Suitable Extinguishing media: Water spray, CO₂, dry chemical, alcohol-type or universal type foams

Specific Hazards: Corrosive liquid. (See Sections 8 and 10.) Do not spray a solid stream of water or foam directly in hot liquid. This may cause frothing.

Protective Equipment and Precautions: Fire fighters should wear NIOSH approved breathing apparatus. Materials can splatter above 100° C / 212° F

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Put on personal protective equipment (see Section 8). Keep spectators away. Floors may be slippery: use care to avoid falling.

Environment Precautions: Keep spills and cleaning run-off out of sewers and open bodies of water.

CONTAINMENT AND CLEAN-UP

Small Spills: Absorb spill with inert material (e.g. sand, earth) and dispose of as waste material in accordance with local, state and federal regulations.

Large Spills: Dike and contain spill with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal.

Waste Disposal: Landfill or incinerate the contaminated solids and diking material in accordance with local, state and federal regulations. Non-salvageable liquid should be drummed and disposed of in accordance with local, state and federal regulations.

7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use only in well-ventilated areas. Avoid breathing vapors or mists. Remove and wash contaminated clothing and footwear before re-use.

Conditions for Safe Storage: Storage temperature (Max. 50°C/120°F - Min. 10°C/49°F)

Other Information: Do not contaminate water, food or feed by storage or disposal. Keep container sealed when not in use. Keep out of reach of children.

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: None listed for ingredients.

Engineering Controls: Use only with adequate ventilation. Use local ventilation and other engineering controls to maintain airborne contaminants below established and recommended exposure limits. If this product contains ingredients with exposure limits, monitoring may be required to determine the effectiveness of ventilation and other control measures.

Personal Protective Equipment (PPE)

Eye/ Face Protection: Safety eyewear is recommended, to avoid chemical splashes and mists.

Skin Protection: Chemical resistant gloves are recommended.

Respiratory Protection: Respiratory protection should be worn when there is a potential of inadequate ventilation. If exposure limits are exceeded or symptoms are experienced, use an approved respirator.
9: PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: clear, purple liquid
- Odor: fresh linen
- Odor Threshold: N/E
- pH: 11.5
- Freezing Point: 32ºF / 0ºC
- Boiling Point: 212 ºF / 100 ºC
- Flash Point: >200ºF / >93ºC
- Evaporation Rate: less than water
- Flammability: not flammable
- Flammability limits: N/E
- Vapor Pressure: N/E
- Vapor Density: greater than air
- Relative Density: 8.7 lb/gal @ 68ºF / 1.04 kg/l @ 20ºC
- Solubility: miscible in water
- Partition Coefficient: N/E
- Auto Ignition temperature: N/E
- Decomposition Temperature: N/E
- Viscosity: < 25 centipoise @ 68ºF (20ºC)
- VOC: 0.51% (as supplied), 0.01% (1:64)

10: STABILITY AND REACTIVITY

- Reactivity: Not reactive under normal conditions.
- Stability: Stable under normal conditions.
- Hazardous reactions: Adding water directly to the product may generate heat and cause product to splash. To avoid adverse reaction, always add product to water, do not add water to product.
- Conditions to avoid: Improper order of dilution. Do not mix with other chemicals.
- Incompatible materials: Strong acids and oxidizing agents
- Hazardous decomposition products: carbon monoxide, carbon dioxide and nitrogen oxides

11: TOXICOLOGICAL INFORMATION

- Acute Toxicity: Not determined on product.

   SPECIFIC EFFECTS
   - Carcinogenicity: None known
   - Reproductive effects: None known
   - Teratogenicity: None known
   - Mutagenicity: None known

   LOCAL EFFECTS
   - Skin contact: Corrosive. Can cause skin burns.
   - Eye contact: Corrosive. Can cause eye burns.
   - Sensitization: None expected
   - Chronic effects: None expected

COMPONENT INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral-Rat (mg/kg)</th>
<th>LD50 Dermal-Rabbit (mg/kg)</th>
<th>LC50 Inhalation-Rat (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-alkyl dimethyl benzyl ammonium chloride</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>n-alkyl dimethyl ethylbenzyl ammonium chloride</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>4090</td>
<td>&gt;2000</td>
<td>1.5 (4 hr)</td>
</tr>
</tbody>
</table>

Carcinogenicity: Components are not known to be listed as carcinogens. (IARC, NTP, OSHA)

12: ECOLOGICAL INFORMATION

- Ecotoxicity: This product is toxic to fish and aquatic invertebrates.
- Persistence and Degradability: Data not available.
- Bioaccumulative Potential: Data not available.
- Mobility in Soil: Data not available.
- Other Adverse Effects: Data not available.

13: DISPOSAL CONSIDERATIONS

Improper order of dilution. Do not mix with other chemicals. Strong acids and oxidizing agents. Improper order of dilution. Do not mix with other chemicals. Improper order of dilution. Do not mix with other chemicals. Improper order of dilution. Do not mix with other chemicals. Improper order of dilution. Do not mix with other chemicals.
Do not contaminate water, food or feed by storage or disposal.

**Pesticide Disposal:**
Disposal of this material should be in accordance with local, regional and national regulations. Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Pesticide waste is acutely hazardous. Improper disposal of excess pesticides, 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.

**Container Disposal:**
Triple rinse (or equivalent). Then offer for recycling or recondition or puncture and dispose of in a sanitary landfill or incineration or, if allowed by state and local authorities, burn. If burned, stay out of smoke.

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**14: TRANSPORT INFORMATION**

| UN Number: | UN1760 |
| UN Proper Shipping Name: | Corrosive liquid, n.o.s. (quaternary ammonium chloride) |
| Hazard Class: | 8 |
| Packing Group: | III |
| Marine Pollutant: | None |
| Transport in Bulk: | N/A |
| Other Information: | Package volumes <5 L each are shipped as Limited Quantity; as permitted by hazard class and quantity exemption. |

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**15: REGULATORY INFORMATION**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling 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 product chemicals.

Following is the hazard information as required on the pesticide label:

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS:**
DANGER. KEEP OUT OF REACH OF CHILDREN. CORROSIVE. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear goggles or face shield, rubber gloves, and protective clothing. Harmful if swallowed. Remove contaminated clothing and wash before reuse. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish and aquatic invertebrates.

**U.S. REGULATIONS/REPORTING:** Components not subject to U.S. Reporting (SARA 302/304, 313, CERCLA)

**STATE RIGHT-TO-KNOW STATUS:** Components not subject to State RTK Listing (MA, NJ, PA, RI)

**CALIFORNIA PROPOSITION 65:** Components are not present on CA Prop 65 listing.

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**16: OTHER INFORMATION**

**Abbreviations Used:**
N/A - Not applicable
N/E - Not Established
N/L - Not Listed

**Revision Information:**
July 13, 2015 - Revisions to 1910.1200 GHS standard
Neither this data sheet nor any statement contained herein grants or extends any license, expressed or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The information in this data sheet has been assembled by the manufacturer based on its own studies and the work of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) or the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnish of such information.

This SDS has been provided to you in accordance with the OSHA Hazard Communication Standard (29CFR1910.1200).

**IMPORTANT SAFETY INFORMATION** **DO NOT DISCARD** **PLEASE ROUTE TO COMPANY SAFETY OFFICER**