1. IDENTIFICATION

Product Identifier
Product Name
Choremaster

Other Means of Identification
Product Code
053800

Recommended use of the Chemical and Restrictions on Use
Recommended Use
All purpose cleaner concentrate. For industrial use.

Details of the Supplier of the Safety Data Sheet
Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number
Company Phone Number
Phone: 1-423-337-3180
Emergency Telephone (24 hr)
INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance
Yellow
Physical State
Liquid
Odor
Lemon

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 3</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2 Sub-Category A</td>
</tr>
</tbody>
</table>

Signal Word
Warning

Hazard Statements
Causes mild skin irritation.
Causes serious eye irritation.

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling.
Wear eye protection/face protection.

Precautionary Statements - Response
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 advice/attention.
IF ON SKIN: If skin irritation occurs: get medical advice/attention.

Precautionary Statements - Storage
No other means specified.

Precautionary Statements - Disposal
No other means specified.

Other Hazards
None known.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60-100</td>
</tr>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>111-76-2</td>
<td>3-7</td>
</tr>
<tr>
<td>Tetrasodium EDTA</td>
<td>64-02-8</td>
<td>1-5</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>141-43-5</td>
<td>1-5</td>
</tr>
<tr>
<td>Alcohol Alkoxylate</td>
<td>68987-81-5</td>
<td>1-5</td>
</tr>
<tr>
<td>Phosphated Surfactant</td>
<td>Proprietary</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is “proprietary” and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

**Eye Contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention/advice if irritation persists/

**Skin Contact**
Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse.

**Inhalation**
Remove to fresh air. Call a physician or poison control center immediately.

**Ingestion**
Rinse mouth. Drink plenty of water. If any discomfort persists, obtain medical attention.

Most Important Symptoms and Effects

**Symptoms**
Exposed individuals may experience eye tearing, redness and discomfort.

**Indication of any Immediate Medical Attention and Special Treatment Needed**

**Notes to Physician**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Water spray (fog). Carbon dioxide (CO2). Dry chemical. Foam.

**Unsuitable Extinguishing Media**
Not determined.

**Specific Hazards Arising from the Chemical**
None known.

**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions**
Use personal protection recommended in Section 8.

**Environmental Precautions**
Avoid release to the environment.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment**
Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up Collect in a clean, dry waste container for disposal. Dispose of in accordance with federal, state and local regulations. Use a water rinse for final clean up.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice.

Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Keep out of the reach of children. Store locked up.

Incompatible Materials Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>TWA: 20 ppm</td>
<td>TWA: 50 ppm</td>
<td>IDLH: 700 ppm</td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
<td>TWA: 240 mg/m³ (vacated)</td>
<td>TWA: 5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 25 ppm (vacated)</td>
<td>TWA: 24 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 120 mg/m³ (vacated)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) S*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) S*</td>
<td></td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>STEL: 6 ppm</td>
<td>TWA: 3 ppm</td>
<td>IDLH: 30 ppm</td>
</tr>
<tr>
<td>141-43-5</td>
<td>TWA: 3 ppm</td>
<td>TWA: 6 mg/m³ (vacated)</td>
<td>TWA: 3 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 3 ppm (vacated)</td>
<td>TWA: 8 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 6 ppm</td>
<td>STEL: 6 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 15 mg/m³</td>
<td>STEL: 15 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Controls General ventilation sufficient.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection No protective equipment is needed under normal use conditions.

Skin and Body Protection None under normal use conditions.

Respiratory Protection No protective equipment is needed under normal use conditions.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Lemon</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>12.5-12.9</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>~ 0 °C / ~32 °F</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>~ 100 °C / ~212 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>
Flammability (Solid, Gas)  n/a-liquid
Upper Flammability Limits  Not determined
Lower Flammability Limit  Not determined
Vapor Pressure  Not determined
Vapor Density  Not determined
Specific Gravity  1.03
Water Solubility  Completely soluble @ 25 °C (77 °F)
Solubility in other solvents  Not determined
Partition Coefficient  Not determined
Auto-ignition Temperature  Not determined
Decomposition Temperature  Not determined
Kinematic Viscosity  Not determined
Dynamic Viscosity  Not determined
Explosive Properties  Not determined
Oxidizing Properties  Not determined

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children. Keep from freezing.

Incompatible Materials
Acids.

Hazardous Decomposition Products
When exposed to fire, produces normal products of combustion.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact  Causes serious eye irritation.

Skin Contact  May cause skin irritation.

Inhalation  Avoid breathing vapors or mists.

Ingestion  Do not taste or swallow.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>= 470 mg/kg (Rat)</td>
<td>= 2270 mg/kg (Rat)</td>
<td>= 2.21 mg/L (Rat) (4hr)</td>
</tr>
<tr>
<td>111-76-2 (Rat)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetrasodium EDTA</td>
<td>= 10 g/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64-02-8 (Rat)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>= 1720 mg/kg (Rat)</td>
<td>= 1 mL/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>141-43-5 (Rat)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Alkoxylate</td>
<td>= 2380-2745 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>&gt; 50 mg/L (4hr) (Rat)</td>
</tr>
<tr>
<td>68987-81-5 (Rat)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on Physical, Chemical and Toxicological Effects

Symptoms  Please see section 4 of this SDS for symptoms.
Delayed and Immediate Effects as well as Chronic Effects from Short and Long Term Exposure

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. Group 3 IARC components are "not classifiable as human carcinogens".

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether 111-76-2</td>
<td>A3</td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether 111-76-2</td>
<td>-</td>
<td>1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50</td>
<td>-</td>
<td>1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Tetrasodium EDTA 64-02-8</td>
<td>1.01: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
<td>610: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Monoethanolamine 141-43-5</td>
<td>15: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through</td>
<td>-</td>
<td>65: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Alcohol Alkoxylate 68987-81-5</td>
<td>1-10 mg/L (120hr)</td>
<td>1-10 mg/L (96hr) Pimephales promelas</td>
<td>-</td>
<td>1-10mg/L (48hr)</td>
</tr>
</tbody>
</table>

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether 111-76-2</td>
<td>0.81</td>
</tr>
<tr>
<td>Monoethanolamine 141-43-5</td>
<td>-1.91</td>
</tr>
</tbody>
</table>

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories Not determined

US Federal Regulations

SARA 311/312 Hazard Categories

Acute Health Hazard Yes

SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>111-76-2</td>
<td>3.7</td>
<td>1.0</td>
</tr>
</tbody>
</table>

US State Regulations

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>State List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>141-43-5</td>
<td></td>
</tr>
</tbody>
</table>

AZ – Arizona Ambient Air Quality Guidelines
CT – Connecticut Hazardous Air Pollutants
CA – California Director’s List of Hazardous Substances
CAP65 – California Prop 65
FL – Florida Substances List
ID – Idaho Non-Carcinogen Toxic Air Pollutants
IL – Illinois Toxic Air Contaminate- Carcinogenic
MA – Massachusetts Right to Know List
MN – Minnesota Hazardous Substances List
NJ – New Jersey Right to Know List
PA – Pennsylvania Right to Know List
RI – Rhode Island Hazardous Substances List
## 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Issue Date:** 06-Jul-2012  
**Revision Date:** 30-Jan-2014  
**Revision Note:** New format  
Version 1.0

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet