1. IDENTIFICATION

**Product Identifier**
Product Name: Glass Cleaner Concentrate

**Other Means of Identification**
Product Code: 502000

**Recommended use of the Chemical and Restrictions on Use**
Recommended Use: Glass cleaner. 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** Dark Blue

**Physical State** Liquid

**Odor** Floral

**Classification**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

**Signal Word**

Warning

**Hazard Statements**
Causes eye irritation.
Flammable liquid and vapor.

**Precautionary Statements - Prevention**
Wash face, hands and any exposed skin thoroughly after handling.
Keep container tightly closed and away from heat/sparks/open flames/hot surfaces. — No smoking.
Ground/bond container and receiving equipment, taking precautionary measures against static discharge.
Use only non-sparking tools and explosion-proof equipment.
Wear protective gloves/protective clothing/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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction.

**Precautionary Statements - Storage**
Store in a well-ventilated place. Keep cool.

**Precautionary Statements - Disposal**
Dispose of contents/container in accordance with local, regional, or national regulations.
Other Hazards
None known.

Unknown Acute Toxicity
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>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>10-30</td>
</tr>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>111-76-2</td>
<td>5-10</td>
</tr>
<tr>
<td>Alkyl Polyglycoside Surfactants</td>
<td>68515-73-1/110615-47-9</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. If eye irritation persists: Get medical advice/attention.

Skin Contact
May be irritating to skin. Rinse with soap and water. Get medical advice/attention if rash or irritation persists.

Inhalation
If breathing becomes difficult, remove victim to fresh air. If discomfort persists, get medical advice/attention.

Ingestion
Immediately drink plenty of water. If any discomfort persists, get medical attention.

Most Important Symptoms and Effects

Symptoms
Prolonged contact may cause painful stinging or burning of eyes and lids, watering of eye, and irritation. Prolonged or repeated skin contact may cause irritation.

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. Alcohol resistant foam.

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
Flammable.

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 protective equipment as required.
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 spillage. Collect in a clean, dry waste container for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Advice on Safe Handling

Conditions for Safe Storage, Including Any Incompatibilities
Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.
Incompatible Materials
None known.

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>Isopropyl Alcohol 67-63-0</td>
<td>STEL: 400 ppm</td>
<td>TWA: 400 ppm</td>
<td>IDLH: 2000 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm</td>
<td>TWA: 980 mg/m³</td>
<td>TWA: 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 400 ppm</td>
<td>TWA: 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 500 ppm</td>
<td>TWA: 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 1225 mg/m³</td>
<td>STEL: 500 ppm</td>
</tr>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>TWA: 20 ppm</td>
<td>TWA: 20 ppm</td>
<td>IDLH: 700 ppm</td>
</tr>
<tr>
<td>111-76-2</td>
<td></td>
<td>TWA: 5 ppm</td>
<td>TWA: 24 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Controls
Ventilation systems.

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 required under normal use.

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

Physical State
Liquid

Appearance
Clear

Odor
Floral
Color: Dark Blue

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Remarks / Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>11.5-12.0</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 determined</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
<td>@ 25 °C (77 °F)</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

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 away from heat, flames, and sparks. Keep from freezing.

Incompatible Materials
Avoid strong acids, alkalis, and oxidizing agents.

Hazardous Decomposition Products
Thermal decomposition may produce carbon monoxide and other unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact
Causes eye irritation.

Skin Contact
Prolonged contact may cause redness and irritation.

Inhalation
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

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>Isopropyl Alcohol</td>
<td>= 4396mg/kg (Rat)</td>
<td>= 12800mg/kg (Rat)</td>
<td>= 72.6mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
<td>= 12870 mg/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>
Ethylene Glycol n-Butyl Ether 111-76-2
= 470 mg/kg (Rat)
= 2270 mg/kg (Rat)
= 220 mg/kg (Rabbit)
= 2.21 mg/L (Rat) 4 h
= 450 ppm (Rat) 4 h
Alkyl Polyglycoside Surfactants 68515-73-1/110615-47-9
> 5000 mg/kg (Rat)

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
Not classifiable as a human carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol 67-63-0</td>
<td></td>
<td>Group 3</td>
<td></td>
<td>X</td>
</tr>
<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>

Legend
CGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical Measures of Toxicity
Not determined

Unknown Acute Toxicity
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic 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>Isopropyl Alcohol 67-63-0</td>
<td>1000: 96 h</td>
<td>9640: 96 h Pimenehales promelas mg/L LC50 flow-through 11130: 96 h Pimenehales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>-</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
</tr>
<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>
</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>Isopropyl Alcohol 67-63-0</td>
<td>0.05</td>
</tr>
<tr>
<td>Ethylene Glycol n-Butyl Ether 111-76-2</td>
<td>0.81</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.

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>Toxic</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

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

DOT 
Not regulated when shipped in containers less than 119 gallons

IATA

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
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemical which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<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>Isopropyl Alcohol</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
</tr>
<tr>
<td>Ethylene Glycol n-Butyl Ether</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>111-76-2</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></th>
<th>NFPA</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazards</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Hazards</td>
<td></td>
<td></td>
<td></td>
<td></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>1</td>
<td></td>
<td>2</td>
<td>0</td>
<td>Not determined</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Issue Date: 08-Aug-2011
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