1. PRODUCT AND COMPANY IDENTIFICATION

Product Name/Use: KDS 2 LOOK Glass Cleaner Concentrate

MANUFACTURER
The Butcher Company
67 Forest Street
Marlborough, MA 01752-3012

Butcher Telephone Number: 800-225-9475
Emergency Telephone (24 hours): 800-228-5635
CHEMTREC (U.S./Can.): 800-424-9300
CHEMTREC (Int'l): +1 703-527-3887

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>CAS NO.</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>10 – 25</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>107-98-2</td>
<td>3 – 5</td>
</tr>
<tr>
<td>Alcohol ethoxy sulfate</td>
<td>NA</td>
<td>3 – 5</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>1336-21-6</td>
<td>1 – 3</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>64-02-8</td>
<td>1 – 3</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td>0.25 – &lt;1.0</td>
</tr>
</tbody>
</table>

See Section 8 for Exposure Limits          NA - Not Applicable

OSHA REGULATORY STATUS: This product is classified as hazardous under OSHA regulations.
WHMIS CLASS: Class D- Division 2B

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Clear, Blue Liquid. Ammonia/Solvent Odor. May Cause Eye Irritation. May Be Harmful if Swallowed.

POTENTIAL HEALTH EFFECTS (See Section 11 for Toxicological Information)
PRIMARY ROUTE(s) OF EXPOSURE:  X  Eye  X  Skin Contact  X  Skin Absorption
                                             X  Inhalation  X  Ingestion

EFFECTS OF ACUTE EXPOSURE
EYES:
May cause eye irritation. Symptoms may include redness and pain.

SKIN:
May cause mild skin irritation. Symptoms may include redness. May be absorbed through the skin and may cause effects as described under Inhalation (see below).
INHALATION:
High concentrations of vapor or mist may cause nose, throat and respiratory tract irritation. Symptoms may include coughing, wheezing, shortness of breath and a disagreeable metallic taste. High concentrations of vapor or mist may also cause central nervous system effects including headache, dizziness and nausea.

INGESTION:
May be harmful if swallowed. May cause mouth, throat and stomach irritation. Symptoms may include nausea, vomiting and diarrhea. May also cause central nervous system effects including headache, dizziness and weakness.

EFFECTS OF CHRONIC EXPOSURE:
Prolonged or repeated contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Prolonged inhalation of high concentrations of ammonia above exposure limits (see Section 8, Exposure Controls/Personal Protection) can cause respiratory tract effects including bronchitis, pneumonia and pulmonary edema.

MEDICAL CONDITIONS AGGRAVATED:
May aggravate pre-existing eye, skin and respiratory conditions.

4. FIRST AID MEASURES

EYES:
Flush eyes with plenty of water while holding eyelids apart. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not put any medication in the victim’s eyes unless instructed by a physician. Get medical attention.

SKIN:
Flush with water, then wash with soap and water. Remove saturated clothing. Get medical attention if irritation develops.

INHALATION:
Remove to fresh air. If not breathing, give respiration; if breathing is difficult, give oxygen (by trained personnel only). Get medical attention if symptoms persist.

INGESTION:
Do not induce vomiting. Drink large quantities of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

FLASH POINT AND METHOD: >200°F 93°C TCC

AUTOIGNITION TEMPERATURE: Not applicable.

EXTINGUISHING MEDIA:
Use extinguishing media appropriate for surrounding fire.
HAZARDOUS COMBUSTION PRODUCTS:
Normal products of combustion (carbon monoxide and carbon dioxide), nitrogen oxides, sulfur oxides, and ammonia.

FIRE AND EXPLOSION HAZARDS:
None known.

FIRE FIGHTING INSTRUCTIONS:
This product is not flammable. As in any fire, MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear should be worn.

6. ACCIDENTAL RELEASE MEASURES

See Section 8, Exposure Controls/Personal Protection and Section 3, Hazard Identification. Floors may be slippery. Use care to avoid falling. Ventilate spill area. Contain and isolate spill. Keep non-essential personnel from entering spill area. Use mop, absorbent, or wet vacuum to collect material for proper disposal. Rinse area with water.

7. HANDLING AND STORAGE

HANDLING:
Follow label use directions. Do not mix with other chemicals unless instructed by label directions. Loosen closure cautiously before opening. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling. Remove contaminated clothing. Wash clothing and equipment before reuse.

STORAGE:
Keep container closed when not in use. Store away from incompatible materials. (See Section 10, Stability and Reactivity).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE:
Where eye contact is possible, wear safety glasses with side shields or chemical splash goggles (ANSI Z87.1 approved).

SKIN:
Where prolonged or repeated contact is possible, chemical-resistant clothing (e.g., gloves) is recommended.

RESPIRATORY:
No respiratory protection is required if ventilation is adequate and airborne concentrations are kept below exposure limits. When exposure limits may be exceeded, use appropriate respiratory protection (NIOSH)/MSHA-approved) to prevent overexposure.

ENGINEERING CONTROLS:
Good general room ventilation is expected to be adequate. If user operations generate vapor or mist, ventilation should be used to keep airborne concentrations below exposure limits.
EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>OSHA PEL/STEL</th>
<th>ACGIH TLV/STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>25 ppm (120 mg/m3)/ (Skin)</td>
<td>25 ppm (121 mg/m3)/ (Skin)</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>100 ppm (360 mg/m3)/ 150 ppm (540 mg/m3)</td>
<td>100 ppm (369 mg/m3)/ 150 ppm (553 mg/m3)</td>
</tr>
<tr>
<td>Alcohol ethoxy sulfate</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>50 ppm (35 mg/m3)/ 35 ppm (27 mg/m3)</td>
<td>25 ppm (17 mg/m3)/ 35 ppm (24 mg/m3) (NH₃)</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>1000 ppm (1900 mg/m3)</td>
<td>1000 ppm (1880 mg/m3)</td>
</tr>
</tbody>
</table>

NA - Not Available

9. PHYSICAL AND CHEMICAL PROPERTIES

- PHYSICAL STATE: Liquid
- ODOR: Ammonia/Solvent
- APPEARANCE: Clear, Blue
- pH: 10.1 to 11.1
- PERCENT VOLATILE BY WEIGHT: 94
- VAPOR PRESSURE: Not Available
- VAPOR DENSITY: Not Available
- BOILING POINT: Not Available
- FREEZING/MELTING POINT: Not Available
- SOLUBILITY IN WATER: Complete
- EVAPORATION RATE: Not Available
- SPECIFIC GRAVITY: 1.013
- VISCOSITY: Water Thin
- OCTANOL/WATER PARTITION COEFFICIENT: Not Available
- ODOR THRESHOLD: Not Available

10. STABILITY AND REACTIVITY

STABILITY (CONDITIONS TO AVOID):
- Stable.

POLYMERIZATION:
- Will not occur.

HAZARDOUS DECOMPOSITION:
- None known.

INCOMPATIBLE MATERIALS:
- Oxidizers, chlorine (e.g., bleach), strong acids (e.g., hydrochloric acid), strong bases (e.g., sodium hydroxide), and reactive metals (e.g., aluminum).
11. TOXICOLOGICAL INFORMATION

ACUTE DATA:
Based on testing of a similar product, this product may cause moderate to severe eye irritation and mild skin irritation. It may be harmful if swallowed. It is not considered to be toxic by inhalation. Acute overexposure to high concentrations of 2-butoxyethanol by skin absorption, ingestion and inhalation has caused blood, liver and kidney effects in laboratory animals. The following additional data are available for product ingredients:

<table>
<thead>
<tr>
<th>PRODUCT/INGREDIENT</th>
<th>ORAL LD$_{50}$ (rat)</th>
<th>DERMAL LD$_{50}$ (rabbit)</th>
<th>INHALATION LC$_{50}$ (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>470 mg/kg</td>
<td>220 mg/kg</td>
<td>450 ppm (4-hr)</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>5660 mg/kg</td>
<td>13000 mg/kg</td>
<td>15000 ppm (4-hr)</td>
</tr>
<tr>
<td>Alcohol ethoxy sulfate</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>350 mg/kg</td>
<td>Not Available</td>
<td>3670 ppm (4-hr)</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>3030 mg/kg</td>
<td>&gt;5000 mg/kg</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>7060 mg/kg</td>
<td>Not Available</td>
<td>31623 ppm (4-hr)</td>
</tr>
</tbody>
</table>

SENSITIZATION DATA:
No data available.

CHRONIC DATA:
Prolonged overexposure to ammonia by inhalation has caused respiratory tract effects in humans. Prolonged overexposure to high concentrations of 2-butoxyethanol by skin absorption, ingestion and inhalation has caused blood, liver and kidney effects in laboratory animals. Prolonged overexposure to propylene glycol monomethyl ether by inhalation and ingestion has caused minor liver effects in laboratory animals; overexposure by dermal absorption and ingestion has also caused minor kidney effects in laboratory animals.

REPRODUCTIVE/TERATOGENIC DATA:
Excessive and prolonged ingestion of ethyl alcohol has been found to cause reproductive and teratogenic effects in humans and laboratory animals.

CARCINOGENIC/MUTAGENIC DATA:
Not listed as carcinogenic by NTP, IARC, or ACGIH or regulated as a carcinogen by OSHA.

SYNERGISTIC MATERIALS:
No data available.

12. ECOLOGICAL INFORMATION
This product is made with all biodegradable detergents. No other data available.

13. DISPOSAL CONSIDERATIONS
Disposal of this material should be in accordance with local, state or provincial and federal regulations. The unused product, as manufactured, is a RCRA non-hazardous waste in accordance with 40 CFR 261. The product has not been evaluated by the Toxicity Characteristic Leachate Procedure (TCLP). According to RCRA, it is the responsibility of the waste generator to ensure proper disposal.
14. TRANSPORT INFORMATION

DOT/TDG HAZARDOUS MATERIAL DESCRIPTION: Not regulated

15. REGULATORY INFORMATION

Not meant to be all-inclusive—selected regulations represented.

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
311/312 HAZARD CATEGORIES: Under 40 CFR 370.2, this product meets the following hazard categories: Immediate, Delayed.
313 REPORTABLE INGREDIENTS: 2-Butoxyethanol is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 under the chemical category Glycol Ethers.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
CERCLA REGULATORY: Not reportable under CERCLA.

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA STATUS: This product complies with all TSCA inventory requirements.

MASSACHUSETTS, NEW JERSEY, PENNSYLVANIA RIGHT-TO-KNOW:

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>CAS NO.</th>
<th>STATE LISTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Not Listed</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>107-98-2</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>Alcohol ethoxy sulfate</td>
<td>NA</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>1336-21-6</td>
<td>MA, NJ, PA</td>
</tr>
</tbody>
</table>

NA - Not Applicable

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):
Class D-Division 2B, eye and skin irritant. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
# 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS RATING</th>
<th>NFPA RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>FIRE</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>1</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
</tr>
<tr>
<td>PERSONAL PROTECTION</td>
<td>-</td>
</tr>
</tbody>
</table>

**HMIS RATING**

**NFPA RATING**

**MSDS STATUS**

Revision #: 1

This MSDS replaces the December 18, 1997 MSDS. Any changes in information are as follows:

In Section 1
Date Prepared [ ] Print CHEMTREC Phone Number

In Section 3
Potential Health Effects - Skin Absorption Signs & Symptoms - Inhalation Signs & Symptoms - Skin

In Section 9
(Group Field) for Vapor Pressure (Group Field) for Vapor Pressure Density Odor Threshold (Group Field) for Boiling Point (Group Field) for Freezing Point Specific Gravity (From) (Group Field) for Evaporation Rate Coeff Oil/Water

In Section 10
Hazardous Decomposition Products

In Section 11
Toxicological

In Section 15
OSHA Hazard Comm. Rule WHMIS Class

**APPROVED BY: EH&S/Regulatory Affairs**
**APPROVAL DATE: 11/30/2000**

The information on this data sheet represents our current data and best opinion as to the proper use in handling of the product under normal foreseeable conditions. Any use of this product which is not in conformance with this data sheet or product label, or which involves using the product in combination with any other product or any other process is the responsibility of the user.