1. IDENTIFICATION

Product Identifier
Product Name: Cleaner 4

Other means of identification
SDS #: CS-005
UN/ID No: NA1760

Recommended use of the chemical and restrictions on use
Recommended Use: Cleaning agent.

Details of the supplier of the safety data sheet
Supplier Address: Cross Systems Inc.
1012 North Main St.
Roxboro, NC 27573

Emergency Telephone Number
Company Phone Number: 336-598-5504
Emergency Telephone (24 hr): INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance: Brown liquid
Physical State: Liquid
Odor: Sweet

Classification

<table>
<thead>
<tr>
<th>Skin corrosion/irritation</th>
<th>Category 1</th>
<th>Sub-category C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
<td></td>
</tr>
</tbody>
</table>

Signal Word
Danger

Hazard Statements
Causes severe skin burns and eye damage

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statements - Response
Immediately call a poison center or doctor/physician
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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Soda</td>
<td>1310-73-2</td>
<td>5</td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>111-76-2</td>
<td>2</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

General Advice
Provide this SDS to medical personnel for treatment.

Eye Contact
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.

Skin Contact
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Ingestion
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms
Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media  Not determined.

Specific Hazards Arising from the Chemical
Product does not burn but may decompose or vaporize to toxic vapors. Closed containers may explode due to buildup of pressure when exposed to extreme heat.

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. Avoid contact with eyes and skin. Do not breathe dust/fume/gas/mist/vapors/spray.

Environmental Precautions  See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment  Prevent further leakage or spillage if safe to do so. Prevent runoff to storm sewers and ditches leading to natural waterways.

Methods for Clean-Up  Neutralize spilled material. Retrieve spilled material (absorb, pump, vacuum, shovel) immediately. Dispose of contents/container to an approved waste disposal plant.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling  Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing and eye/face protection. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions  Keep containers tightly closed in a cool, well-ventilated place. Store locked up. Store away from incompatible materials.

Incompatible Materials  Strong oxidizing agents.
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>Caustic Soda 1310-73-2</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³ (vacated)</td>
<td>Ceiling: 2 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl 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: 120 mg/m³ (vacated)</td>
<td>TWA: 24 mg/m³</td>
</tr>
<tr>
<td></td>
<td>IDLH: 2 mg/m³</td>
<td>S*</td>
<td>S*</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls: Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection: Use chemical safety goggles and/or full face shield.

Skin and Body Protection: Impervious gloves and protective clothing are recommended.

Respiratory Protection: Use supplied-air respiratory protection in confined or enclosed spaces.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid
Appearance: Brown liquid
Color: Brown
Odor: Sweet
Odor Threshold: Not determined

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>13</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>&gt; 93 °C / 200 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid- Not Applicable</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>1.0791</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
<td></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>
<tr>
<td>Additional Information</td>
<td>Volatizes Content: 21</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
Strong oxidizing agents.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Do not inhale.

Ingestion Do not ingest.

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>Caustic Soda 1310-73-2</td>
<td>-</td>
<td>= 1350 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl Ether 111-76-2</td>
<td>= 470 mg/kg (Rat)</td>
<td>= 2270 mg/kg (Rat) = 220 mg/kg (Rabbit)</td>
<td>= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h</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 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 Monobutyl Ether 111-76-2</td>
<td>A3</td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend
ACGIH (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"
12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

<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>Caustic Soda 1310-73-2</td>
<td></td>
<td>45.4: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl 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>1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>

Persistence/Degradability
This product is biodegradable.

Bioaccumulation
Not determined.

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Monobutyl 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>Caustic Soda 1310-73-2</td>
<td>Toxic Corrosive</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**
- **UN/ID No**: NA1760
- **Proper Shipping Name**: Compounds, Cleaning Liquid (ethylene glycol monobutyl ether)
- **Hazard Class**: 8
- **Packing Group**: III

**IATA**
- **UN/ID No**: UN1760
- **Proper Shipping Name**: Corrosive Liquid, n.o.s (ethylene glycol monobutyl ether)
- **Hazard Class**: 8
- **Packing Group**: III

**IMDG**
- **UN/ID No**: UN1760
- **Proper Shipping Name**: Corrosive Liquid, n.o.s (ethylene glycol monobutyl ether)
- **Hazard Class**: 8
- **Packing Group**: III

15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Soda</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl Ether</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Soda</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals 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 Monobutyl Ether</td>
<td>111-76-2</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl Ether - 111-76-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Soda</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caustic Soda 1310-73-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ethylene Glycol Monobutyl Ether 111-76-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

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>3</td>
<td>1</td>
<td>0</td>
<td>Not determined</td>
</tr>
<tr>
<td>HMIS</td>
<td>Health Hazards</td>
<td>Flammability</td>
<td>Physical Hazards</td>
<td>Personal Protection</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>D</td>
</tr>
</tbody>
</table>

Issue Date: 11-May-2011
Revision Date: 17-Nov-2014
Revision Note: New format

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.

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End of Safety Data Sheet