SAFETY DATA SHEET

Section 1 - Identification

Product Identifier
CHEM-EEZ Heavy Duty Cleaner / Degreaser

Other means of identification
1001

Recommended use
Alkaline cleaner.

Recommended restrictions
For commercial and industrial use only.

Manufacturer / Importer / Supplier / Distributor Information

Company Name
National Chemical Laboratories of PA, Inc.

Address
401 N. 10th Street - Philadelphia, PA 19123

Telephone
1 (215) 922-1200

Supplier Email
info@nclonline.com

Contact
CHEM-TEL

Emergency Phone
1 (800) 255-3924

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

Physical Hazards
Not Classified

Health Hazards
Serious eye damage/eye irritation

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>1</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>1</td>
</tr>
</tbody>
</table>

OSHA defined hazards
Not Classified.

Label Elements

Hazard Symbol

Signal Word
Danger

Hazard Statement
Causes severe skin burns and eye damage.

Precautionary statement

Prevention
Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection.

Response
If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
Not classified.

Section 3 - Composition/Information on ingredients

Mixture

Hazardous Components

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Nonylphenol, ethoxylated</td>
<td>9016-45-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Section 4 - First-aid Measures

Inhalation
If respiratory irritation or distress occurs, remove victim to fresh air. If breathing is difficult, give oxygen. If breathing stops, apply artificial respiration. CONSULT A PHYSICIAN.

Skin contact
Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation persists. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Check and remove contact lenses. Continue to rinse for at least 10 minutes.
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**Ingestion**
Rinse mouth thoroughly with water. DO NOT induce vomiting. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than the hips to help prevent aspiration. Call a physician or poison control center immediately.

**Most Important symptoms /effects, acute and delayed**
Causes skin and eye burns.

**Indication of immediate medical attention and special treatment**
Treat symptomatically.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### Section 5 - Fire-fighting measures

**Suitable extinguishing media**
Carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog.

**Unsuitable extinguishing media**
Not available.

**Specific hazards arising from the chemical**
None known.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment /instructions**
Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool.

### Section 6 - Accidental release measures

**Personal precautions, protective equipment and emergency procedures.**
Isolate area. Keep unnecessary personnel away. Use personal protection as recommended in Section 8 of the SDS.

**Methods and materials for containment and cleaning up**
SMALL SPILLAGE: Absorb spillage with suitable absorbent material. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water.
LARGE SPILLS: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

### Section 7 - Handling and storage

**Precautions for safe handling**
Do not get in eyes, on skin, or on clothing. Do not breathe mist or vapor. Do not taste or swallow. Use with adequate ventilation. Wash thoroughly after handling. Use Personal Protective Equipment recommended in section 8 of the SDS.

**Conditions for safe storage, including any incompatibilities**
Store away from incompatible materials. Keep container closed.

### Section 8 - Exposure control/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>240 mg/m³, 50 ppm</td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>Ceiling</td>
<td>2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>24 mg/m³, 5 ppm</td>
<td></td>
</tr>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>Ceiling</td>
<td>2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**US. ACGIH. BEIs. Biological Exposure Indices**

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
<th>Determine</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>200 mg/g</td>
<td>Butoxyacetic acid (BAA), with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

**Exposure guidelines**
Use personal protective equipment as required. Keep working clothes separately.

**US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants**

**Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>Can be absorbed though the skin.</td>
</tr>
</tbody>
</table>

**US.Minnesota Hazardous Substances List (Minn. Rules 5206.0400).**

**Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>Skin designation applies.</td>
</tr>
</tbody>
</table>

**US.NIOSH: Pocket Guide to Chemical Hazards**

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CHEM-EEZ Heavy Duty Cleaner / Degreaser 1001
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Section 9 - Physical and chemical properties

Appearance
Clear.

Physical state
Liquid.

Form
Liquid.

Color
Purple.

Odor
Sassafras.

Odor threshold
Not available.

pH
13.3

Melting point/freezing point
Not available.

Initial boiling point and boiling range
212 °F (100 °C)

Flash point
> 212.0 °F (> 100.0 °C)

Evaporation rate
Not available.

Flammability (solid, gas)
Not applicable.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
Similar to water.

Vapor density
Similar to water.

Relative density
1.04 ± 0.01

Relative density temperature
75 °F (23.9 °C)

Solubilities (water)
100 % Soluble.

Partition Coefficient
n-octanol/water
Not available

Auto-ignition temperature
Not Available

Decomposition temperature
Not Available

Viscosity
< 10 cP

Viscosity Temperature
75 °F (23.9 °C)

Section 10 - Stability and reactivity

Reactivity
The product is non-reactive under normal conditions of use, storage and transport.
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Section 11 - Toxicological information

Information on likely routes of exposure

Inhalation  May be harmful if swallowed.
Ingestion   May be harmful if swallowed.
Skin contact May cause burns in mucous membranes, throat, esophagus and stomach.
Eye contact  Causes skin burns.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects.

Acute toxicity May be harmful if swallowed.

<table>
<thead>
<tr>
<th>Component</th>
<th>Level</th>
<th>Type</th>
<th>Code</th>
<th>Species</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>Acute</td>
<td>Dermal</td>
<td>LD50</td>
<td>Rabbit</td>
<td>400 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Mouse</td>
<td>700 ppm, 7 hours</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rat</td>
<td>450 mg/l, 4 hrs</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Guinea pig</td>
<td>1.2 g/kg</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Mouse</td>
<td>1519 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rabbit</td>
<td>0.32 g/kg</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rat</td>
<td>560 mg/kg</td>
</tr>
<tr>
<td>Nonylphenol, ethoxylated (CAS 9016-45-9)</td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Mouse</td>
<td>4290 mg/kg, bw</td>
</tr>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rabbit</td>
<td>500 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation Causes skin burns. Causes serious eye damage.
Serious eye damage/ eye irritation Causes serious eye damage.
Respiratory sensitization Not classified.
Skin sensitization Not available.
Germ cell mutagenicity Not classified.
Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Result</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>3</td>
<td>Not classifiable as to carcinogenicity to humans.</td>
</tr>
</tbody>
</table>

Reproductive toxicity Not classified.
Specific target organ toxicity - single exposure Not classified.
Specific target organ toxicity - repeated exposure Not classified.
Aspiration hazard Not classified.

Section 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(s) Nonylphenol, ethoxylated, 9016-45-9

Aquatic

<table>
<thead>
<tr>
<th>Level</th>
<th>Type</th>
<th>Code</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia magna</td>
<td>65 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
<td>12.2 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
<td>Bluegill (leptomis macrochirus)</td>
<td>1 - 1.6 mg/l 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability The product is expected to be biodegradable.
Bioaccumulative potential Not known.

Partition coefficient n-octanol / water log (Kow)

<table>
<thead>
<tr>
<th>Components</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Mobility in soil Not available.
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**Section 13 - Disposal considerations**

- **Disposal instructions**: Dispose in accordance with applicable federal, state, and local regulations.
- **Local disposal regulations**: Dispose of in accordance with local regulations.
- **Hazardous waste code**: Waste codes should be assigned by the user based on the application for which the product was used.
- **Waste from residues / unused products**: Dispose in accordance with all applicable regulations.
- **Contaminated packaging**: Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**Section 14 - Transport information**

**DOT**
- **UN number**: UN1824
- **Proper shipping name**: SODIUM HYDROXIDE SOLUTION
- **Transport hazard class(es)**: 8
- **Packing group**: I
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.
- **Special provisions**: B2, IB2, N34, T7, TP2
- **Packaging exemption**: 154
- **Packaging non bulk**: 202
- **Packaging bulk**: 242

**IATA**
- **UN number**: UN1824
- **UN proper shipping name**: SODIUM HYDROXIDE SOLUTION
- **Transport hazard class(es)**: 8
- **Packing group**: I
- **Environmental hazards**: No.
- **ERG Code**: 8L
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.

**IMDG**
- **UN number**: UN1824
- **UN proper shipping name**: SODIUM HYDROXIDE SOLUTION
- **Transport hazard class(es)**: 8
- **Packing group**: I
- **Environmental hazards**: No.
- **Marine pollutant**: No.
- **EmS**: F-A, S-B
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.

**Transportation in bulk according to Annex II of MARPOL 73/78 and IBC Code**: This substance/mixture is not intended to be transported in bulk.

**Section 15 - Regulatory Information**

**US federal regulations**
- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- **TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D)**: Not regulated.
- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  - Components:
    - Sodium Hydroxide (CAS 1310-73-2): LISTED
    - 2-Butoxyethanol (CAS 111-76-2): LISTED
- **Superfund Amendments and Reauthorization Act of 1986 (SARA)**
  - **Hazard Categories**:
    - Immediate Hazard: Yes
    - Delayed Hazard: No
    - Fire Hazard: No
    - Pressure Hazard: No
    - Reactivity Hazard: No
  - **SARA 302 Extremely hazardous substance**: No
  - **SARA 311/312 Hazardous chemical**: Yes
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SARA 313 (TRI reporting)

Chemical name

2-Butoxyethanol

CAS # 111-76-2

% by wt. 1 - 5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HSPs) List Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Drug Enforcement Administration (DEA), List 1 2 Not regulated.

Exempt Chemical Mixtures (21 CFR 1310.12(c)) Not regulated.

DEA Exempt Chemical Mixtures Code Number Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

US.Massachusetts RTK - Substance List Components

2-Butoxyethanol (CAS 111-76-2)

Sodium Hydroxide (CAS 1310-73-2)

US.New Jersey Worker and Community Right-to-Know Act Components

2-Butoxyethanol (CAS 111-76-2)

Sodium Hydroxide (CAS 1310-73-2)

US.Pennsylvania RTK - Hazardous Substances Components

2-Butoxyethanol (CAS 111-76-2)

Sodium Hydroxide (CAS 1310-73-2)

US.Rhode Island RTK Components

2-Butoxyethanol (CAS 111-76-2)

Sodium Hydroxide (CAS 1310-73-2)

US - California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region Inventory Name On Inventory (yes/no)*

Australia Australian Inventory of Chemical Substances (AICS) Yes

Canada Domestic Substances List (DSL) Yes

Canada Non-Domestic Substances List (NDSL) No

China Inventory of Existing Chemical Substances in China (IECSC) Yes

Europe European Inventory of Existing Commercial Chemical Substances (EINECS) No

Europe European List of Notified Chemical Substances (ELINCS) No

Japan Inventory of Existing and New Chemical Substances (ENCS) No

Korea Existing Chemicals List (ECL) Yes

New Zealand New Zealand Inventory Yes

Philippines Philippine Inventory of Chemicals and Chemical Substances Yes

United States Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16 - Other information, including date of preparation or last version

Revision date 1/17/2018

Version # 02

Further information Not available.

Disclaimer

The information contained herein was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond the manufacturer’s control, it is the user’s responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising from the product’s improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various government agencies may have specific regulations concerning the transportation, handling, storage, use or disposal of this product which may not be reflected in this SDS. The user should review these regulations to ensure full compliance.

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