SAFETY DATA SHEET

Section 1 - Identification

Product Identifier
ENDURE™ Heavy Duty Bonnet & Traffic Lane Carpet Cleaner

Other means of identification
0621

Recommended use
Detergent.

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
Skin corrosion/irritation

OSHA defined hazards
Not Classified.

Label Elements

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/protective clothing/eye protection/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. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

Storage
Store locked up.

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

Hazard(s) not otherwise classified (HNOC)
None known.

Section 3 - Composition/Information on ingredients

Mixture

Hazardous Components
Ingredient Name                  CAS #          %
4-Nonylphenol, branched, ethoxylated 127087-87-0 5 - 10
2-Butoxyethanol                   111-76-2       1 - 5
Sodium Hydroxide                  1310-73-2      0.1 - 1

Section 4 - First-aid Measures

Inhalation
If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do.
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Section 5 - Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

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.

General fire hazards
No unusual fire or explosion hazards noted.

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.
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 breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

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>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>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>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>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>Determinate</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>Butyloxycetic acid (BAA), with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
</tbody>
</table>

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

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

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

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Exposure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>Exposure</td>
<td></td>
</tr>
</tbody>
</table>
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General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment. No personal respiratory protective equipment normally required.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection
If use of product risks exposure to contact, wear safety glasses with side shields.

Skin protection
Hand protection
Impervious gloves are recommended for prolonged use.

Other
If use of product risk exposure to contact, wear suitable protective clothing.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment. No personal respiratory protective equipment normally required.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9 - Physical and chemical properties

Appearance
Clear.

Physical state
Liquid.

Form
Liquid.

Color
Colorless.

Odor
Butyl.

Odor threshold
Not available.

pH
13.2

Melting point/freezing point
Not available.

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

Flash point
None to boiling.

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

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
1.01 ± 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 cSt

Viscosity Temperature
75 °F (23.9 °C)
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## Section 10 - Stability and reactivity

<table>
<thead>
<tr>
<th>Reactivity</th>
<th>Reacts violently with strong acids. This product may react with oxidizing agents.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Material is stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No dangerous reaction known under conditions of normal use.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Do not mix with other chemicals. Contact with incompatible materials.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Acids. Oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>No hazardous decomposition products are known.</td>
</tr>
</tbody>
</table>

## Section 11 - Toxicological information

### Information on likely routes of exposure

- **Inhalation**: May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
- **Skin contact**: Causes severe skin burns. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
- **Eye contact**: Causes serious eye damage.
- **Symptoms related to the physical, chemical and toxicological characteristics**: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

### Acute toxicity

<table>
<thead>
<tr>
<th>Components</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>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 severe skin burns and eye damage.

### Serious eye damage/eye irritation

Causes serious eye damage.

### Respiratory sensitization

This product is not expected to cause respiratory sensitization.

### Skin sensitization

This product is not expected to cause skin sensitization.

### Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

### 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

This product is not expected to cause reproductive or developmental effects.

### Specific target organ toxicity - single exposure

Not classified.

### Specific target organ toxicity - repeated exposure

Not classified.

### Aspiration hazard

Not classified.

### Chronic effects

May be harmful if absorbed through skin. Prolonged inhalation may be harmful. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

## 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.

### Persistence and degradability

No data is available on the degradability of this product.

### Bioaccumulative potential

No data available.

### 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>
<tr>
<td>4-Nonylphenol, branched, ethoxylated (CAS 127087-87-0)</td>
<td>2.1 - 3.4 (Calculated)</td>
</tr>
</tbody>
</table>

### Mobility in soil

No data 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
III

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Labels required
8

Special provisions
IB3, N34, T4, TP1

Packaging exemption
154

Packaging non bulk
203

Packaging bulk
This substance/mixture is not intended to be transported in bulk.

IATA

UN number
UN1824

UN proper shipping name
SODIUM HYDROXIDE SOLUTION

Transport hazard class(es)
8

Packing group
III

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
III

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. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D)
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Components
Result
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
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Reactivity Hazard No
SARA 302 Extremely hazardous substance Not listed.
SARA 311/312 Hazardous chemical Yes
SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS #</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

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.
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

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory Name</th>
<th>On Inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>Yes</td>
</tr>
<tr>
<td>United States Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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
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.