SAFETY DATA SHEET

Section 1 - Identification

Product Identifier: GREEN EMERALD Premium Dishwash Detergent
Other means of identification: 1100
Recommended use: Synthetic 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: Causes serious eye irritation.
OSHA defined hazards: Not Classified.

Hazard Symbol

Signal Word: Warning
Hazard Statement: Causes serious eye irritation.
Precautionary statement:
Prevention: Wash thoroughly after handling. Wear eye/face protection.
Response: If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage: Store away from incompatible materials.
Disposal: Dispose of waste and residues in accordance with local authority requirements.

Section 3 - Composition/Information on ingredients

Mixture Hazardous Components
Ingredient Name: Sodium dodecylbenzenesulfonate
CAS #: 25155-30-0
%: 10 - 15
Ingredient Name: Sodium laureth sulfate
CAS #: 9004-82-4
%: 1 - 5

Section 4 - First-aid Measures

Inhalation: Move to fresh air. Get medical attention if irritation develops and persists.
Skin contact: Wash with plenty of water. Get medical attention if irritation persists.
Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
Ingestion: Rinse mouth. Get medical attention if irritation develops and persists.
Most Important symptoms/effects, acute and delayed: Serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
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### 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 | 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 | Use standard firefighting procedures and consider the hazards of other involved materials. |
| Specific Methods | 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 Spills: 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. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | 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 | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities must be available when handling this product. |

| 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. |
| 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 | Viscous Liquid. |
| Color | Green. |
| Odor | Citrus. |
| Odor threshold | Not available. |
| pH | 8.8 |
| 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 | |
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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  1.03 ± 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  1200 cSt
Viscosity Temperature  75 °F (23.9 °C)

Section 10 - Stability and reactivity
Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability  Material is stable under normal conditions.
Possibility of hazardous reactions  No dangerous reaction known under conditions of normal use.
Conditions to Avoid  Contact with incompatible materials.
Incompatible materials  Strong oxidizing agents.
Hazardous Decomposition Products  No hazardous decomposition products are known.

Section 11 - Toxicological information
Information on likely routes of exposure
Inhalation  No adverse effects due to inhalation are expected.
Skin contact  Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Eye contact  Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics
Serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects.
Acute toxicity  Not expected to be acutely toxic.

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>Level</th>
<th>Type</th>
<th>Code</th>
<th>Species</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium laureth sulfate (CAS 9004-82-4)</td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rat</td>
<td>1600 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/ eye irritation</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Respiratory sensitization</td>
<td></td>
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<tr>
<td>Skin sensitization</td>
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<tr>
<td>Germ cell mutagenicity</td>
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<td></td>
<td></td>
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<tr>
<td>Carcinogenicity</td>
<td></td>
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<tr>
<td>Reproductive toxicity</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
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<td></td>
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<tr>
<td>Specific target organ toxicity - repeated exposure</td>
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<tr>
<td>Aspiration hazard</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Chronic effects</td>
<td></td>
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</tr>
</tbody>
</table>

Section 12 - Ecological Information
Ecotoxicity  The product contains a substance which is toxic to aquatic organisms.

Component(s)
Sodium dodecylbenzenesulfonate, 25155-30-0

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>Water flea (Ceriodaphnia dubia)</td>
<td>3.26-14.51 mg/l , 48 hrs.</td>
</tr>
</tbody>
</table>
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Sodium laureth sulfate, 9004-82-4

Aquatic
Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
Partition coefficient n-octanol / water log (Kow)
Components
Sodium dodecylbenzenesulfonate (CAS 25155-30-0) Results
0.45

Mobility in soil
No data available.

Mobility in general
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

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

MARPOL 73/78 and IBC Code

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.
CERCLA Hazardous Substance List (40 CFR 302.4)
Components
Sodium dodecylbenzenesulfonate (CAS 25155-30-0) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard Categories
Immediate Hazard Yes
Delayed Hazard Yes
Fire Hazard No
Pressure Hazard No
Reactivity Hazard No

SARA 302 Extremely hazardous substance Not listed.
SARA 311/312 Hazardous chemical Yes
SARA 313 (TRI reporting) Not regulated.

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
Sodium dodecylbenzenesulfonate (CAS 25155-30-0)

US.New Jersey Worker and Community Right-to-Know Act Components
Sodium dodecylbenzenesulfonate (CAS 25155-30-0)

US.Pennsylvania RTK - Hazardous Substances Components
Sodium dodecylbenzenesulfonate (CAS 25155-30-0)

US.Rhode Island RTK Components
Sodium dodecylbenzenesulfonate (CAS 25155-30-0)
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).

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**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.

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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.