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Section 1 - Identification

Product Identifier SHA-ZYME DRC
Other means of identification 1831
Recommended use Enzyme cleaner.
Recommended restrictions For commercial and industrial use only.

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

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 2
OSHA defined hazards Not Classified.

Signal Word Warning
Hazard Statement Causes serious eye irritation.
Precautionary statement

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition/Information on ingredients

Composition Comments * mixture of ethoxylates, each is below threshold of reportable limit.

Section 4 - First-aid Measures

Inhalation Move to fresh air. Get medical attention if irritation persists.
Skin contact Wash skin with soap and water. Get medical attention if irritation persists.
Eye contact Flush eyes thoroughly with water for at least 15 minutes. Get medical attention if irritation persists.
Ingestion Rinse mouth thoroughly with water. Seek medical advice.

Most Important symptoms /effects, acute and delayed Causes eye irritation.

Indication of immediate medical attention and special treatment Treat symptomatically.
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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
This material will not burn. Use fire-extinguishing media appropriate for surrounding materials.

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.

General fire hazards
This product is not flammable or combustible.

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
Avoid contact with eyes. 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
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

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

Appropriate engineering controls
Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Provide easy access to water supply and eye wash facilities.

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 adequate 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
Slightly hazy liquid.

Physical state
Liquid.

Form
Liquid.

Color
Translucent light blue.

Odor
Spring Blossom (Fresh Floral)

Odor threshold
Not available.

pH
9.2 ± 0.2

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 available.

Upper/lower flammability or explosive limits
### Flammability and Explosive Limits

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure</td>
<td>Similar to water.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Similar to water.</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.01 ± 0.01</td>
</tr>
<tr>
<td>Relative density temperature</td>
<td>75 °F (23.9 °C)</td>
</tr>
<tr>
<td>Solubilities (water)</td>
<td>100 % Soluble.</td>
</tr>
<tr>
<td>Partition Coefficient n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>&lt; 10 cP</td>
</tr>
<tr>
<td>Viscosity Temperature</td>
<td>75 °F (23.9 °C)</td>
</tr>
</tbody>
</table>

### Section 10 - Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable at normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Hazardous polymerization does not occur.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Contact with incompatible materials.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Carbon oxides.</td>
</tr>
</tbody>
</table>

### Section 11 - Toxicological Information

#### Information on likely routes of exposure

- **Inhalation**: No adverse effects due to ingestion 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**: Causes eye irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation.

#### Information on toxicological effects

- **Acute toxicity**: Not expected to be hazardous.
- **Skin corrosion/irritation**: Prolonged or repeated contact may dry skin and cause irritation.
- **Serious eye damage/eye irritation**: Causes eye irritation.
- **Respiratory sensitization**: Not classified.
- **Skin sensitization**: Not available.
- **Germ cell mutagenicity**: Not classified.
- **Carcinogenicity**: Not classified.

- **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 contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

#### Component(s)

- Alcohols, C12-13 Ethoxylated, 66455-14-9

#### 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>Water flea (Daphnia magna)</td>
<td>0.39 - 0.56 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
<td>Flathead minnow (Pimephales promelas)</td>
<td>0.72 - 2.7 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

#### Persistence and degradability

The product is expected to be biodegradable.
### Section 13 - Disposal considerations

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

### 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 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**

- TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D) Not regulated.
- CERCLA Hazardous Substance List (40 CFR 302.4) Not 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 Not listed.
  - SARA 311/32 Hazardous chemical No
  - 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 Not regulated.
- US.New Jersey Worker and Community Right-to-Know Act Not listed.
- US.Pennsylvania RTK - Hazardous Substances Not listed.
- US.Rhode Island RTK Not regulated.
- US - California Proposition 65 This material is not known to expose you to a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**International Inventories**

<table>
<thead>
<tr>
<th><strong>Country(s) or region</strong></th>
<th><strong>Inventory Name</strong></th>
<th><strong>On Inventory (yes/no)</strong></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 Chemicals 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>Unites States Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>
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*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        |
| References    | HSDB® - Hazardous Substances Data Bank  
HPVIS - High Production Volume Information System |
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