### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier**

| Trade name | **Brite Clean Enzyme Cleaner** |

1.2 **Relevant identified uses of the substance or mixture and uses advised against**

| Relevant identified uses | enzyme based cleaner |

1.3 **Details of the supplier of the safety data sheet**

| Commodore Sales Inc. |
| 11002 Trade Rd. |
| Richmond, VA 23236 |
| 800-747-1992 |

Competent person responsible for the SDS: **Robert Blahnik**

1.4 **Emergency telephone number**

| Emergency information service | **USA 1.800.535.5053, INTL 1.352.323.3500** |
| 24 hour emergency telephone number. |

### SECTION 2: Hazards identification

2.1 **Classification of the substance or mixture**

<table>
<thead>
<tr>
<th>Classification acc. to OSHA &quot;Hazard Communication Standard&quot; (29 CFR 1910.1200)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annex</strong></td>
</tr>
<tr>
<td>B.6</td>
</tr>
<tr>
<td>A.3</td>
</tr>
</tbody>
</table>

**Remarks**

For full text of H-phrases: see SECTION 16.

**Hazards not otherwise classified**

Harmful to aquatic life (GHS category 3: aquatic toxicity - acute).

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 **Label elements**

<table>
<thead>
<tr>
<th>Labelling acc. to OSHA &quot;Hazard Communication Standard&quot; (29 CFR 1910.1200)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signal word</strong></td>
</tr>
<tr>
<td><strong>Pictograms</strong></td>
</tr>
</tbody>
</table>
This material is combustible, but will not ignite readily.

For full text of abbreviations: see SECTION 16.

Hazard statements
H227 Combustible liquid.
H319 Causes serious eye irritation.

Precautionary statements

Precautionary statements - prevention
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - 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.
In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

2.3 Other hazards
This material is combustible, but will not ignite readily.

SECTION 3: Composition/information on ingredients

3.1 Substances
not relevant (mixture)

3.2 Mixtures

Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM</td>
<td>CAS No 34580-94-8</td>
<td>5 - &lt; 10</td>
<td>B.6</td>
<td>Flam. Liq. 4</td>
</tr>
<tr>
<td>tetrapotassium pyrophosphate</td>
<td>CAS No 7320-34-5</td>
<td>1 - &lt; 5</td>
<td>A.1I</td>
<td>Acute Tox. 4</td>
</tr>
<tr>
<td>A.3</td>
<td></td>
<td></td>
<td>A.3</td>
<td>Eye Irrit. 2A</td>
</tr>
<tr>
<td>Alcohols, C9-11 ethoxylated</td>
<td>CAS No 68439-46-3</td>
<td>1 - &lt; 5</td>
<td>A.3</td>
<td>Eye Dam. 1</td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.
SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
Provide fresh air.

Following skin contact
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.

Following eye contact
Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
- water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO2)

Unsuitable extinguishing media
- water jet

5.2 Special hazards arising from the substance or mixture
In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Explosive when mixed with combustible material.

Hazardous combustion products
- nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   For non-emergency personnel
   Remove persons to safety.
   For emergency responders
   Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions
   Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up
   Advices on how to contain a spill
   Covering of drains.
   Advices on how to clean up a spill
   Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).
   Appropriate containment techniques
   Use of adsorbent materials.
   Other information relating to spills and releases
   Place in appropriate containers for disposal. Ventilate affected area.

Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Recommendations
   Measures to prevent fire as well as aerosol and dust generation
   Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools.
   Warning
   Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.
   Advice on general occupational hygiene
   Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.
7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres
  Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards
  Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Incompatible substances or mixtures
Observe compatible storage of chemicals.

Control of the effects

Protect against external exposure, such as frost

Consideration of other advice

Ventilation requirements
Use local and general ventilation. Ground/bond container and receiving equipment.

Packaging compatibilities
Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)
See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>dipropylene glycol methyl ether</td>
<td>34590-94-8</td>
<td>PEL</td>
<td>100</td>
<td>600</td>
<td></td>
<td></td>
<td>29 CFR OSHA</td>
</tr>
</tbody>
</table>

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

Relevant DNELs/DMELs/PNECs and other threshold levels
No data available.
8.2 Exposure controls

Appropriate engineering controls
General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection
Wear eye/face protection.

Skin protection

• hand protection
Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• other protection measures
Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls
Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state liquid
Color amber
Odor fresh

Other physical and chemical parameters

pH (value) 10 - 10.4 at 25 °C
Melting point/freezing point not determined
Initial boiling point and boiling range 100 °C
Flash point 75 °C at 1013 mbar (closed cup)
Evaporation rate not determined
Flammability (solid, gas) not relevant (fluid)

Explosive limits

• lower explosion limit (LEL) 1.1 vol%
• upper explosion limit (UEL) 14 vol%

Vapor pressure 31.69 hPa at 25 °C

Density 1.015 g/cm³ 8.45 lbs/US Gal
Concerning incompatibility: see below “Conditions to avoid” and “Incompatible materials”. The mixture contains reactive substance(s): risk of ignition

See below “Conditions to avoid”.

No known hazardous reactions.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Strong shocks

There is no additional information.

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.
SECTION 11: Toxicological information

11.1 Information on toxicological effects
Test data are not available for the complete mixture.

Classification procedure
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity
Shall not be classified as acutely toxic.

Acute toxicity of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>ATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrapotassium pyrophosphate</td>
<td>7320-34-5</td>
<td>inhalation: dust/mist</td>
<td>&gt;1.1</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Shall not be classified as a respiratory or skin sensitizer.

Summary of evaluation of the CMR properties
Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Carcinogenicity
• National Toxicology Program (United States): none of the ingredients are listed
• IARC Monographs none of the ingredients are listed

Specific target organ toxicity (STOT)
Shall not be classified as a specific target organ toxicant.

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)
Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td>LC50</td>
<td>&gt;150 mg/l</td>
<td>fish</td>
<td>72 hours</td>
</tr>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td>ErC50</td>
<td>&gt;969 mg/l</td>
<td>algae</td>
<td>72 hours</td>
</tr>
<tr>
<td>tetrapotassium pyrophosphate</td>
<td>7320-34-5</td>
<td>EC50</td>
<td>&gt;100 mg/l</td>
<td>aquatic invertebrates</td>
<td>48 hours</td>
</tr>
</tbody>
</table>
12.2 Process of degradability
Data are not available.

Degradability of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Process</th>
<th>Degradation rate</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td>oxygen depletion</td>
<td>75 %</td>
<td>10 d</td>
</tr>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td>DOC removal</td>
<td>96 %</td>
<td>28 d</td>
</tr>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td>carbon dioxide generation</td>
<td>76 %</td>
<td>28 d</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential
Data are not available.

Bioaccumulative potential of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>BCF</th>
<th>Log KOW</th>
<th>BOD5/COD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td>0.0061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohols, C9-11 ethoxylated</td>
<td>68439-46-3</td>
<td>3.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Data are not available.

12.6 Other adverse effects
Data are not available.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information
Solvent reclamation/regeneration.

Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages
Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

13.3 Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

14.2 UN proper shipping name
not relevant

14.3 Transport hazard class(es)
Class -

14.4 Packing group
not relevant

14.5 Environmental hazards

14.6 Special precautions for user
There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
The cargo is not intended to be carried in bulk.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

SARA TITLE III (Superfund Amendment and Reauthorization Act)
List of Extremely Hazardous Substances (40 CFR 355) (EPCRA Section 302 and 304) none of the ingredients are listed
Specific Toxic Chemical Listings (40 CFR 372) (EPCRA Section 313) none of the ingredients are listed

Industry or sector specific available guidance(s)
### NPCA-HMIS® III
Hazardous Materials Identification System (American Coatings Association)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td>*</td>
<td>Chronic (long-term) health effects may result from repeated overexposure.</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
<td>Temporary or minor injury may occur.</td>
</tr>
<tr>
<td>Flammability</td>
<td>2</td>
<td>Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>0</td>
<td>Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.</td>
</tr>
<tr>
<td>Personal protective equipment</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### NFPA® 704

<table>
<thead>
<tr>
<th>Category</th>
<th>Degree of hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>2</td>
<td>Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.</td>
</tr>
<tr>
<td>Health</td>
<td>0</td>
<td>Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material.</td>
</tr>
<tr>
<td>Instability</td>
<td>0</td>
<td>Materials that are normally stable, even under fire conditions.</td>
</tr>
<tr>
<td>Special hazard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Right to Know Hazardous Substance List

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Remarks</th>
<th>Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPM</td>
<td>34590-94-8</td>
<td></td>
<td>F2</td>
</tr>
</tbody>
</table>

**Legend**

- F2: Flammable - Second Degree.

**Proposition 65 List of chemicals**

- none of the ingredients are listed

**Relevant European Union (EU) safety, health and environmental provisions**

**Classification according to GHS (1272/2008/EC, CLP)**

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Category</th>
<th>Hazard class and category</th>
</tr>
</thead>
<tbody>
<tr>
<td>serious eye damage/eye irritation</td>
<td></td>
<td>2 (Eye Irrit. 2)</td>
</tr>
</tbody>
</table>
### 16.2 Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>acute toxicity</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate</td>
</tr>
<tr>
<td>BCF</td>
<td>BioConcentration Factor</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical Oxygen Demand</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>COD</td>
<td>chemical oxygen demand</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>Eye Dam.</td>
<td>seriously damaging to the eye</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>irritant to the eye</td>
</tr>
<tr>
<td>Flam. Liq.</td>
<td>flammable liquid</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IARC Monographs</td>
<td>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans</td>
</tr>
<tr>
<td>log KOW</td>
<td>n-octanol/water</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration (United States)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</td>
</tr>
<tr>
<td>vPvB</td>
<td>very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

### 16.3 Key literature references and sources for data
16.4 Classification procedure
   Physical and chemical properties: The classification is based on tested mixture.
   Health hazards/Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

16.5 List of relevant phrases (code and full text as stated in chapter 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H227</td>
<td>combustible liquid</td>
</tr>
<tr>
<td>H318</td>
<td>causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>causes serious eye irritation</td>
</tr>
<tr>
<td>H332</td>
<td>harmful if inhaled</td>
</tr>
</tbody>
</table>

16.7 Disclaimer
   This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.