acc. to OSHA, Appendix D to § 1910.1200

## **Brite Clean Enzyme Cleaner**

Version number: GHS 1.0 Date of compilation: 2015-05-19

## 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

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

Annex	<ul> <li>Hazard class and category</li> </ul>	- Haza	ard statement code(s)	
B.6	flammable liquids	Cat. 4	(Flam. Liq. 4)	H227
A.3	serious eye damage/eye irritation	Cat. 2	(Eye Irrit. 2)	H319

#### 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

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

Signal word warning

**Pictograms** 

GHS07



acc. to OSHA, Appendix D to § 1910.1200

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#### **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

Name of substance	Identifier	Wt%	Hazard class and category		Hazard state- ment
DPM	CAS No 34590-94-8	5 - < 10	B.6	Flam. Liq. 4	H227
tetrapotassium pyrophosphate	CAS No 7320-34-5	1 - < 5	A.11 A.3	Acute Tox. 4 Eye Irrit. 2A	H332 H319
Alcohols, C9-11 ethoxylated	CAS No 68439-46-3	1 - < 5	A.3	Eye Dam. 1	H318

For full text of abbreviations: see SECTION 16.

acc. to OSHA, Appendix D to § 1910.1200

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## **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.

acc. to OSHA, Appendix D to § 1910.1200

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## **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

Hazardous combustion products: see section 5. Personal precautions: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **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.

acc. to OSHA, Appendix D to § 1910.1200

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## 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)

Coun- try	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
US	dipropylene glycol methyl ether	34590-94-8	PEL	100	600			29 CFR OSHA

## Notation

**TWA** 

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.

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.

acc. to OSHA, Appendix D to § 1910.1200

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## 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)upper explosion limit (UEL)1.1 vol%14 vol%

Vapor pressure 31.69 hPa at 25 °C

Density 1.015 <sup>9</sup>/<sub>cm<sup>3</sup></sub> 8.45 lbs/US Gal

acc. to OSHA, Appendix D to § 1910.1200

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Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

n-octanol/water (log KOW)

This information is not available.

Auto-ignition temperature 270 °C

Viscosity not determined

Explosive properties none
Oxidizing properties none

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s): risk of ignition

#### · if heated

risk of ignition

#### 10.2 Chemical stability

See below "Conditions to avoid".

## 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

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

## Hints to prevent fire or explosion

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

#### Physical stresses which might result in a hazardous situation and have to be avoided

strong shocks

#### 10.5 Incompatible materials

There is no additional information.

#### Hazardous decomposition products

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

acc. to OSHA, Appendix D to § 1910.1200

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## **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

Name of substance	CAS No	Exposure route	ATE
tetrapotassium pyrophosphate	7320-34-5	inhalation: dust/mist	>1.1

#### 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

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
DPM	34590-94-8	LC50	>150 <sup>mg</sup> / <sub>I</sub>	fish	72 hours
DPM	34590-94-8	ErC50	>969 <sup>mg</sup> / <sub>I</sub>	algae	72 hours
tetrapotassium pyrophosphate	7320-34-5	EC50	>100 <sup>mg</sup> / <sub>I</sub>	aquatic invertebrates	48 hours

acc. to OSHA, Appendix D to § 1910.1200

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Alcohols, C9-11 ethoxylated	68439-46-3	LC50	7 <sup>mg</sup> / <sub>I</sub>	fish	96 hours
Alcohols, C9-11 ethoxylated	68439-46-3	EC50	2.5 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 hours

## 12.2 Process of degradability

Data are not available.

## Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
DPM	34590-94-8	oxygen depletion	75 %	10 d
DPM	34590-94-8	DOC removal	96 %	28 d
DPM	34590-94-8	carbon dioxide generation	76 %	28 d

## 12.3 Bioaccumulative potential

Data are not available.

## Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
DPM	34590-94-8		0.0061	
Alcohols, C9-11 ethoxylated	68439-46-3		3.75	

## 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.

acc. to OSHA, Appendix D to § 1910.1200

## **Brite Clean Enzyme Cleaner**

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## **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 none of the ingredients are listed 302 and 304)

Specific Toxic Chemical Listings (40 CFR 372) (EPCRA Section 313) none of the ingredients are listed

Industry or sector specific available guidance(s)

acc. to OSHA, Appendix D to § 1910.1200

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#### **NPCA-HMIS® III**

Hazardous Materials Identification System (American Coatings Association)

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

## **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States) - National Fire Protection Association (United States)

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

## **Right to Know Hazardous Substance List**

Name of substance	CAS No	Remarks	Classifications
DPM	34590-94-8		F2

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)

Hazard class Category Hazard class and category

serious eye damage/eye irritation

2 (Eye Irrit. 2)

United States BB 01451 SDS-01

acc. to OSHA, Appendix D to § 1910.1200

## **Brite Clean Enzyme Cleaner**

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## **SECTION 16: Other information**

## 16.2 Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR OSHA	29 CFR §1910.1001 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
Acute Tox.	acute toxicity
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
BCF	BioConcentration Factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	chemical oxygen demand
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
Eye Dam.	seriously damaging to the eye
Eye Irrit.	irritant to the eye
Flam. Liq.	flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
log KOW	n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant)
NFPA® 704	National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States)
NPCA-HMIS®	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts per million
vPvB	very Persistent and very Bioaccumulative

#### 16.3 Key literature references and sources for data

- OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200 49 CFR  $\S$  172.101 Hazardous Materials Table (DOT)

acc. to OSHA, Appendix D to § 1910.1200

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## 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)

Code	Text
H227	combustible liquid
H318	causes serious eye damage
H319	causes serious eye irritation
H332	harmful if inhaled

## 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.