

Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

Cleansmart Power Zyme

Version number: GHS 1.0

Date of compilation: 2016-07-19

SECTION 1: Identification

1.1 Product identifier

Trade name **Cleansmart Power Zyme**

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

Relevant identified uses carpet cleaner

1.3 Details of the supplier of the safety data sheet

Cleansmart Technologies
P. O. Box 2126
Loveland, Co. 80539
877-701-5271

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: Hazard(s) identification

2.1 Classification of the substance or mixture

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

Annex	-	Hazard class and category	-	Hazard statement code(s)	
A.3		serious eye damage/eye irritation		Cat. 1 (Eye Dam. 1)	H318

Remarks

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

Hazards not otherwise classified

Harmful to aquatic life with long lasting effects (GHS category 3: aquatic toxicity - acute and chronic).

2.2 Label elements

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

Signal word danger

Pictograms

GHS05



Hazard statements

H318 Causes serious eye damage.

Precautionary statements

Precautionary statements - prevention

Wear protective gloves/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.

Immediately call a POISON CENTER/doctor.

Hazardous ingredients for labelling

Alcohols, C9-11 ethoxylated

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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 statement
Alcohols, C9-11 ethoxylated	CAS No 68439-46-3	1 - < 5	A.10 Acute Tox. 4 A.1D Acute Tox. 4 A.3 Eye Dam. 1	H302 H312 H318
dipropylene glycol monomethyl ether	CAS No 34590-94-8	1 - < 5	B.6 Flam. Liq. 4	H227
d-limonene	CAS No 5989-27-5	< 1	B.6 Flam. Liq. 3 A.2 Skin Irrit. 2 A.4S Skin Sens. 1A A.10 Asp. Tox. 1	H226 H315 H317 H304
naphthalene	CAS No 91-20-3	< 1	B.7 Flam. Sol. 2 A.10 Acute Tox. 4 A.11 Acute Tox. 1 A.6 Carc. 2	H228 H302 H330 H351

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

SECTION 4: First-aid measures

4.1

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.

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SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

water, foam, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO₂), sulphur oxides (SO_x)

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. - Take up mechanically.

Advices on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 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.

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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. Take precautionary measures against static discharge. Use only in well-ventilated areas. Never add water to this product. Ground/bond container and receiving equipment.

Warning

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Handling of incompatible substances or mixtures

Do not mix with alkali.

Keep away from

caustic solutions

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

Removal of dust deposits.

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

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)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
US	particulates not otherwise regulated (PNOR)		PEL	1,766	15			29 CFR OSHA
US	particulates not otherwise regulated (PNOR)		PEL	529.5	5			29 CFR OSHA
US	dipropylene glycol methyl ether	34590-94-8	PEL	100	600			29 CFR OSHA
US	naphthalene	91-20-3	PEL	10	50			29 CFR OSHA

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.

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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 protective 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

Particulate filter device (EN 143).

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	solid (powder)
Color	light yellow
Odor	characteristic

Other physical and chemical parameters

pH (value)	9 - 10 (100 mg/l, 25 °C) (acid)
Melting point/freezing point	not determined
Initial boiling point and boiling range	190 °C
Flash point	86 °C at 101.3 kPa (closed cup)
Evaporation rate	not determined
Flammability (solid, gas)	this material is combustible, but will not ignite readily
Vapor pressure	0.05 kPa at 20 °C
Density	2.249 g/ml
Solubility(ies)	not determined
Partition coefficient n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	270 °C
Viscosity	not relevant (solid matter)
Explosive properties	none
Oxidizing properties	none

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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

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.

10.6 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.

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
Alcohols, C9-11 ethoxylated	68439-46-3	oral	1,200 mg/kg
Alcohols, C9-11 ethoxylated	68439-46-3	dermal	2,000 mg/kg
naphthalene	91-20-3	oral	710 mg/kg
naphthalene	91-20-3	inhalation: vapor	>0.4 mg/l/4h
naphthalene	91-20-3	inhalation: dust/mist	0.005 mg/l/4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

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Serious eye damage/eye irritation

Causes serious eye damage.

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

Name of substance	Name acc. to inventory	CAS No	wt%	Classification
naphthalene	Naphthalene	91-20-3	0.00003629	Reasonably anticipated to be a human carcinogen

- IARC Monographs

Name of substance	Name acc. to inventory	CAS No	wt%	Classification	Remarks	Number
d-limonene	d-Limonene	5989-27-5	0.4784	3		Volume 73
naphthalene	Naphthalene	91-20-3	0.00003629	2B		Volume 82

Legend

- 2B Possibly carcinogenic to humans.
3 Not classifiable as to carcinogenicity in humans.

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

Harmful to aquatic life with long lasting effects.

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
Alcohols, C9-11 ethoxylated	68439-46-3	LC50	7 mg/l	fish	96 h
Alcohols, C9-11 ethoxylated	68439-46-3	EC50	2.5 mg/l	aquatic invertebrates	48 h
dipropylene glycol monomethyl ether	34590-94-8	LC50	>150 mg/l	fish	72 h
dipropylene glycol monomethyl ether	34590-94-8	ErC50	>969 mg/l	algae	72 h
d-limonene	5989-27-5	LC50	720 µg/l	fish	96 h
d-limonene	5989-27-5	EC50	688 µg/l	fish	96 h

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
naphthalene	91-20-3	LC50	6.08 mg/l	fish	96 h
naphthalene	91-20-3	EC50	2.16 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic)

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
d-limonene	5989-27-5	EC50	0.85 mg/l	aquatic invertebrates	24 h
naphthalene	91-20-3	LC50	7.76 mg/l	fish	24 h

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
dipropylene glycol mono-methyl ether	34590-94-8	oxygen depletion	75 %	10 d
dipropylene glycol mono-methyl ether	34590-94-8	DOC removal	96 %	28 d
dipropylene glycol mono-methyl ether	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
Alcohols, C9-11 ethoxylated	68439-46-3		3.75	
dipropylene glycol mono-methyl ether	34590-94-8		0.0061	
d-limonene	5989-27-5		4.38	
naphthalene	91-20-3		3.4	

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.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

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.

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 (not subject to transport regulations)
- 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 none (non-environmentally hazardous acc. to the dangerous goods regulations)
- 14.6** Special precautions for user
There is no additional information.
- 14.7** Transport in bulk according to Annex II of MARPOL 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)

Toxic Substance Control Act (TSCA)

all ingredients are listed or exempt from listing

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

Name of substance	CAS No	Remarks	Effective date
naphthalene	91-20-3		1986-12-31

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System (American Coatings Association)

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Category	Rating	Description
Chronic	*	Chronic (long-term) health effects may result from repeated overexposure.
Health	3	Major injury likely unless prompt action is taken and medical treatment is given.
Flammability	2	Material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
Physical hazard	0	Material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive.
Personal protective equipment	-	

NFPA® 704

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

Category	Degree of hazard	Description
Flammability	2	Material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
Health	3	Material that, under emergency conditions, can cause serious or permanent injury.
Instability	0	Material that is 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
naphthalene	91-20-3		CA F2

Legend

CA Carcinogenic.
F2 Flammable - Second Degree.

Proposition 65 List of chemicals

none of the ingredients are listed

Name of substance	CAS No	Remarks	Type of the toxicity
naphthalene	91-20-3		cancer

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

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

Hazard class

serious eye damage/eye irritation

Category Hazard class and category

1 (Eye Dam. 1)

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SECTION 16: Other information, including date of preparation or last revision

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
Asp. Tox.	aspiration hazard
ATE	Acute Toxicity Estimate
BCF	BioConcentration Factor
BOD	Biochemical Oxygen Demand
Carc.	carcinogenicity
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
Flam. Sol.	flammable solid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HMIS	Hazardous Materials Identification System
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® III	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
PEL	permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	parts per million
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
Skin Sens.	skin sensitization
STEL	short-term exposure limit
TWA	time-weighted average
vPvB	very Persistent and very Bioaccumulative

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16.3 Key literature references and sources for data

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

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
H226	flammable liquid and vapor
H227	combustible liquid
H228	flammable solid
H302	harmful if swallowed
H304	may be fatal if swallowed and enters airways
H312	harmful in contact with skin
H315	causes skin irritation
H317	may cause an allergic skin reaction
H318	causes serious eye damage
H330	fatal if inhaled
H351	suspected of causing cancer

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.