Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

Cleansmart SensaClean

Version number: GHS 4.0
Replaces version of: 2015-08-06 (GHS 3)

revision: 2016-05-12

SECTION 1: Identification

1.1 Product identifier

Trade name **Cleansmart SensaClean**

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

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

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. 2 (Eye Irrit. 2)	H319

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 **warning**

Pictograms

GHS07

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

Precautionary statements - prevention

Wash thoroughly after handling.

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.

If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

There is no additional information.

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
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	CAS No 51981-21-6	1 - < 5	A.1I	Acute Tox. 4	H332
decyl glucoside	CAS No 68515-73-1	1 - < 5	A.3	Eye Dam. 1	H318
lauryl glucoside	CAS No 110615-47-9	1 - < 5	A.2 A.3	Skin Irrit. 2 Eye Dam. 1	H315 H318
alcalase	CAS No 9014-01-1	< 1	A.1O A.2 A.3 A.4R A.8R	Acute Tox. 4 Skin Irrit. 2 Eye Dam. 1 Resp. Sens. 1 STOT SE 3	H302 H315 H318 H334 H335

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.

SECTION 5: Fire-fighting 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

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.

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.

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. Use only in well-ventilated areas.

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

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Control of the effects

Protect against external exposure, such as

frost

Consideration of other advice

Packaging compatibilities

Only packagings which are approved (e.g. acc. to DOT) 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)

No information available.

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	colorless
Odor	odorless

Other physical and chemical parameters

pH (value)	6 (25 °C)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	not determined (closed cup)
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	not determined
Vapor pressure	31.69 hPa at 25 °C
Density	0.98 - 1.02 $^{g}/_{cm^3}$
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient	
n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	460 °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".

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.

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
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	inhalation: dust/mist	>4.2 $^{mg}/_{l}$/4h
alcalase	9014-01-1	oral	1,800 $^{mg}/_{kg}$

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

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
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	LC50	>100 $^{mg}/_{l}$	fish	96 h
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	EC50	>100 $^{mg}/_{l}$	aquatic invertebrates	48 h
decyl glucoside	68515-73-1	LC50	100.8 $^{mg}/_{l}$	fish	96 h
decyl glucoside	68515-73-1	ErC50	27.22 $^{mg}/_{l}$	algae	72 h
decyl glucoside	68515-73-1	EC50	>100 $^{mg}/_{l}$	aquatic invertebrates	48 h
lauryl glucoside	110615-47-9	LC50	2.95 $^{mg}/_{l}$	fish	96 h
lauryl glucoside	110615-47-9	EC50	7 $^{mg}/_{l}$	aquatic invertebrates	48 h
lauryl glucoside	110615-47-9	ErC50	12.5 $^{mg}/_{l}$	algae	72 h
alcalase	9014-01-1	LC50	14.6 $^{mg}/_{l}$	fish	96 h
alcalase	9014-01-1	EC50	0.868 $^{mg}/_{l}$	aquatic invertebrates	48 h
alcalase	9014-01-1	ErC50	1.48 $^{mg}/_{l}$	algae	72 h

Aquatic toxicity (chronic)

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
decyl glucoside	68515-73-1	EC50	>560 $^{mg}/_{l}$	microorganisms	6 h
lauryl glucoside	110615-47-9	LC50	3.2 $^{mg}/_{l}$	fish	28 d
alcalase	9014-01-1	EC50	1.29 $^{mg}/_{l}$	aquatic invertebrates	24 h

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	oxygen depletion	96 %	28 d
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	carbon dioxide generation	32 %	28 d
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	DOC removal	23 %	28 d
decyl glucoside	68515-73-1	DOC removal	100 %	28 d
lauryl glucoside	110615-47-9	oxygen depletion	88 %	28 d
lauryl glucoside	110615-47-9	DOC removal	>99.4 %	28 d
alcalase	9014-01-1	carbon dioxide generation	10 %	2 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
tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6		-0.00001	
alcalase	9014-01-1		-3.1	

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

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

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

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System (American Coatings Association)

Category	Rating	Description
Chronic	/	None.
Health	2	Temporary or minor injury may occur.
Flammability	1	Material that must be preheated 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	1	Material that must be preheated before ignition can occur.
Health	0	Material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material.
Instability	0	Material that is normally stable, even under fire conditions.
Special hazard		

Right to Know Hazardous Substance List none of the ingredients are listed

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)
hazardous to the aquatic environment - chronic hazard	3	(Aquatic Chronic 3)

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

16.1 Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
1.1	Trade name: SensaClean	Trade name: Cleansmart SensaClean	yes
1.3	Details of the supplier of the safety data sheet: Clean Smart 1121 E Eisenhower Blvd Loveland,CO 80537 970-669-5407	Details of the supplier of the safety data sheet: Cleansmart Technologies P. O. Box 2126 Loveland, Co. 80539 877-701-5271	yes
1.3	Competent person responsible for the SDS: Robert Blahnik		yes

16.2 Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	acute toxicity
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
DOT	Department of Transportation (USA)
Eye Dam.	seriously damaging to the eye

Abbr.	Descriptions of used abbreviations
Eye Irrit.	irritant to the eye
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® 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
PNEC	Predicted No-Effect Concentration
Resp. Sens.	respiratory sensitization
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
STOT SE	specific target organ toxicity - single exposure
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 § 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
H302	harmful if swallowed
H315	causes skin irritation
H318	causes serious eye damage
H319	causes serious eye irritation
H332	harmful if inhaled
H334	may cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	may cause respiratory irritation

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.