

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

### SECTION 1: Identification

#### 1.1 Product identifier

Trade name

**Clean Smart Crystal Defoamer**

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

Relevant identified uses

de-foamer

#### 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)**

This mixture does not meet the criteria for classification. This mixture does not meet the criteria for classification as hazardous according to OSHA, Appendix D to 1910.1200.

#### 2.2 Label elements

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

not required

#### 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**

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.

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

### 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, foam, ABC-powder

#### Unsuitable extinguishing media

water jet

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>)

### 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 of 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 protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

### 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. 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.

##### Advice on general occupational hygiene

Wash hands after use. Do not 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	Notation	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Source
US	particulates not otherwise classified (PNOC)		i, dust	PEL	1,766	15					29 CFR 1910.1000
US	particulates not otherwise classified (PNOC)		partml, r, dust	PEL	529.5	5					29 CFR 1910.1000

##### Notation

Ceiling-C dust

Ceiling value is a limit value above which exposure should not occur. As dust.

i

Inhalable fraction.

partml

Particles/ml.

r

Respirable fraction.

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).

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

### Notation

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

### 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
Color	various
Odor	characteristic

#### Other physical and chemical parameters

pH (value)	not applicable
Melting point/freezing point	801 °C at 1 atm
Initial boiling point and boiling range	1,100 °C
Flash point	not applicable (closed cup)
Evaporation rate	not determined
Flammability (solid, gas)	product is combustible
Explosion limits of dust clouds	not determined
Vapor pressure	not determined
Density	2.184 g/ml
Solubility(ies)	not determined
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	not determined
Viscosity	not relevant (solid matter)

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

Explosive properties	none
Oxidizing properties	none
	There is no additional information.

### 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

oxidizers

#### 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)

This mixture does not meet the criteria for classification.

##### Acute toxicity

Shall not be classified as acutely toxic.

##### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

##### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

##### 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.

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

### **Carcinogenicity**

- |  |                                    |
|--|------------------------------------|
| • National Toxicology Program (United States): | none of the ingredients are listed |
| • IARC Monographs                              | none of the ingredients are listed |
| • OSHA Carcinogens (United States)             | 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**

Shall not be classified as hazardous to the aquatic environment.

#### **Aquatic toxicity (acute)**

Shall not be classified as hazardous to the aquatic environment.

### **12.2 Persistence and degradability**

Data are not available.

### **12.3 Bioaccumulative potential**

Data are not available.

### **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.

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

### 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)<br>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<br>There is no additional information.  |  |
| 14.7 | Transport in bulk according to Annex II of MARPOL and the IBC Code<br>The cargo is not intended to be carried in bulk. |  |

#### Information for each of the UN Model Regulations

- **Transport of dangerous goods by road or rail (49 CFR US DOT)**

not subject to transport regulations

- **International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

- **International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

### 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

##### **Superfund Amendment and Reauthorization Act (SARA TITLE III )**

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

##### **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

none of the ingredients are listed

##### **Clean Air Act**

none of the ingredients are listed

##### **Drug precursors, Controlled Substances Act (21 U.S.C. § 802)**

none of the ingredients are listed

##### **Industry or sector specific available guidance(s)**

##### **NPCA-HMIS® III**

Hazardous Materials Identification System (American Coatings Association)

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

Category	Rating	Description
Chronic	/	None.
Health	0	No significant risk to health.
Flammability	0	Material that will not burn under typical fire conditions.
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 protection	-	

### 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	0	Material that will not burn under typical fire conditions.
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

### National inventories

Country	Inventory	Status
CA	DSL	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	all ingredients are listed

### Legend

DSL Domestic Substances List (DSL).  
REACH Reg. REACH registered substances.  
TSCA Toxic Substance Control Act.

## 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
2.1	Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.	Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): This mixture does not meet the criteria for classification. This mixture does not meet the criteria for classification as hazardous according to OSHA, Appendix D to 1910.1200.	yes
5.2	Special hazards arising from the substance or mixture: Deposited combustible dust has considerable explosion potential.	Special hazards arising from the substance or mixture	yes



# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
5.2	Hazardous combustion products: nitrogen oxides (NOx), sulphur oxides (SOx)	Hazardous combustion products: nitrogen oxides (NOx), sulfur oxides (SOx)	yes
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.	Reference to other sections: Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
9.1	Color: different	Color: various	yes
9.1	Oxidizing properties: none	Oxidizing properties: none There is no additional information.	yes
10.5	Incompatible materials: There is no additional information.	Incompatible materials: oxidizers	yes
11.1	Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): not relevant	Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200): This mixture does not meet the criteria for classification.	yes
11.1		• OSHA Carcinogens (United States): none of the ingredients are listed	yes
12.1	Biodegradation: The relevant substances of the mixture are readily biodegradable.		yes
14.7		Information for each of the UN Model Regulations	yes
14.7		• Transport of dangerous goods by road or rail (49 CFR US DOT): not subject to transport regulations	yes
14.7		• International Maritime Dangerous Goods Code (IMDG): Not subject to IMDG.	yes
14.7		• International Civil Aviation Organization (ICAO-IATA/DGR): Not subject to ICAO-IATA.	yes
15.1	Toxic Substance Control Act (TSCA): all ingredients are listed or exempt from listing	Toxic Substance Control Act (TSCA): all ingredients are listed	yes
15.1		Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	yes
15.1		List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4): none of the ingredients are listed	yes
15.1		Clean Air Act: none of the ingredients are listed	yes
15.1		Drug precursors, Controlled Substances Act (21 U.S.C. § 802): none of the ingredients are listed	yes
15.1		NPCA-HMIS® III: change in the listing (table)	yes
15.1		NFPA® 704: change in the listing (table)	yes
15.1		National inventories	yes
15.1		National inventories: change in the listing (table)	yes

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
16.2		Abbreviations and acronyms: change in the listing (table)	yes

### 16.2 Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
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
STEL	Short-term exposure limit
TWA	Time-weighted average
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).

# Safety Data Sheet

acc. to OSHA, Appendix D to § 1910.1200

## Clean Smart Crystal Defoamer

Version number: GHS 2.0  
Replaces version of: 2016-06-03 (GHS 1)

revision: 2018-10-29

---

**16.5**

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

**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.