acc. to OSHA, Appendix D to § 1910.1200

Concrete- Orange Turns Green

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

1.1 Product identifier

Trade name Concrete- Orange Turns Green

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

Relevant identified uses concrete cleaner

Uses advised against do not use for squirting or spraying

do not use for products which come into direct contact with

the skir

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

Classification of the substance or mixture

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

Annex	 Hazard class and category 	- Haza	ard statement code(s)	
A.2	skin corrosion/irritation	Cat. 1A	(Skin Corr. 1A)	H314
A.3	serious eye damage/eye irritation	Cat. 1	(Eye Dam. 1)	H318

Remarks

2.1

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).

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

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

Signal word danger

acc. to OSHA, Appendix D to § 1910.1200

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Pictograms

GHS05



Hazard statements

H314

Causes severe skin burns and eye damage.

Precautionary statements

Precautionary statements - prevention

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

Precautionary statements - disposal

Dispose of contents/container to industrial combustion plant.

Hazardous ingredients for labelling

sodium carbonate

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
sodium carbonate	CAS No 497-19-8	10 - < 25	A.2 A.3	Skin Corr. 1A Eye Dam. 1	H314 H318
trisodium phosphate	CAS No 10101-89-0	5 - < 10	A.2 A.3 A.8R	Skin Irrit. 2 Eye Irrit. 2A STOT SE 3	H315 H319 H335
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

In case of respiratory tract irritation, consult a physician. 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, foam, alcohol resistant 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. 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. - Take up mechanically.

Advices on how to clean up a spill

Take up mechanically. Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).

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. 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.

Handling of incompatible substances or mixtures

Do not mix with acids.

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

Removal of dust deposits.

Incompatible substances or mixtures

Observe compatible storage of chemicals.

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

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	particulates not otherwise regulated (PNOR)		PEL		15			29 CFR OSHA
US	particulates not otherwise regulated (PNOR)		PEL		5			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.

Relevant DNELs/DMELs/PNECs and other threshold levels

No data available.

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

acc. to OSHA, Appendix D to § 1910.1200

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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, granular)

Color yellow-orange

Odor fresh

Other physical and chemical parameters

pH (value) 12 - 12.5 in 10 ^{mg}/_l water at 25 °C (base)

Melting point/freezing point not determined

Initial boiling point and boiling range 260 °C

Flash point not applicable

(closed cup)

Evaporation rate not determined

Flammability (solid, gas)

Explosion limits of dust clouds not determined

Vapor pressure 0.0089 Pa at 25 °C

Density not determined

Relative density Information on this property is not available.

Solubility(ies)

Water solubility miscible in any proportion

acc. to OSHA, Appendix D to § 1910.1200

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Partition coefficient

n-octanol/water (log KOW)

This information is not available.

Auto-ignition temperature 311 °C

Viscosity not relevant (solid matter)

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.

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.

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.

acc. to OSHA, Appendix D to § 1910.1200

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Skin corrosion/irritation

Causes severe skin burns and eye damage.

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

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
sodium carbonate	497-19-8	LC50	300 ^{mg} / _I	fish	96 hours
sodium carbonate	497-19-8	EC50	227 ^{mg} / _I	aquatic invertebrates	48 hours
trisodium phosphate	10101-89-0	LC50	440 ^{mg} / _l	bluegill	96 hours
trisodium phosphate	10101-89-0	LC50	260 ^{mg} / _l	Oncorhynchus mykiss (rainbow trout)	96 hours
trisodium phosphate	10101-89-0	EC50	>1000 ^{mg} / _I	daphnia magna	48 hours
Alcohols, C9-11 ethoxylated	68439-46-3	LC50	7 ^{mg} / _I	fish	96 hours
Alcohols, C9-11 ethoxylated	68439-46-3	EC50	2.5 ^{mg} / _l	aquatic invertebrates	48 hours

Aquatic toxicity (chronic)

acc. to OSHA, Appendix D to § 1910.1200

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Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium carbonate	497-19-8	LC50	385 ^{mg} / _I	fish	24 h
sodium carbonate	497-19-8	EC50	403 ^{mg} / _I	aquatic invertebrates	24 h

12.2 Process of degradability

Data are not available.

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	

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.

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.

acc. to OSHA, Appendix D to § 1910.1200

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14.1 UN number **1759**

14.2 UN proper shipping name CORROSIVE SOLID, N.O.S.

14.3 Transport hazard class(es)

Class 8 (corrosive substances)

14.4 Packing group III (substance presenting low danger)

14.5 Environmental hazards none (non-environmentally hazardous acc. to the danger-

ous goods regulations)

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.

Information for each of the UN Model Regulations

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

Index number 1759

Proper shipping name Corrosive solid, n.o.s.

Class 8
Packing group III
Danger label(s) 8



14.8

Special provisions (SP) 128, IB8, IP3, T1, TP33

ERG No 154

• International Maritime Dangerous Goods Code (IMDG)

UN number 1759

Proper shipping name CORROSIVE SOLID, N.O.S.

Class 8
Packing group III
Danger label(s) 8



Special provisions (SP) 223, 274

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg

EmS F-A, S-B

Stowage category B

acc. to OSHA, Appendix D to § 1910.1200

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

UN number 1759

Proper shipping name Corrosive solid, n.o.s.

Class 8

Danger label(s) 8



Packing group

Special provisions (SP)

Excepted quantities (EQ)

Limited quantities (LQ)

A3

E1

5 kg

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)

NPCA-HMIS® III

Hazardous Materials Identification System (American Coatings Association)

Category	Rating	Description
Chronic	/	None.
Health	3	Major injury likely unless prompt action is taken and medical treatment is given.
Flammability	1	Materials that must be preheated before ignition can occur.
1 -		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)

acc. to OSHA, Appendix D to § 1910.1200

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Category	Degree of hazard	Description	
Flammability	1	Materials that must be preheated before ignition can occur.	
Health 3 Materials that, under emergency conditions, can cause serious or permanent injury.		Materials that, under emergency conditions, can cause serious or permanent injury.	
Instability 0		Materials that are normally stable, even under fire conditions.	
Special hazard			

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

serious eye damage/eye irritation

Category Hazard class and category

2 (Eye Irrit. 2)

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)
49 CFR US DOT	49 CFR § 40 U.S. Department of Transportation
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
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
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
Eye Dam.	seriously damaging to the eye
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
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

acc. to OSHA, Appendix D to § 1910.1200

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Abbr.	Descriptions of used abbreviations
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
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)

Classification procedure 16.4

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
H314	causes severe skin burns and eye damage
H315	causes skin irritation
H318	causes serious eye damage
H319	causes serious eye irritation
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.