Concrete- Orange Turns Green

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

cement cleaner

Uses advised against

do not use for squirting or spraying

do not use for products which come into direct contact with the skin

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)

<table>
<thead>
<tr>
<th>Annex</th>
<th>Hazard class and category</th>
<th>Hazard statement code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.2</td>
<td>skin corrosion/irritation</td>
<td>Cat. 1A (Skin Corr. 1A)</td>
</tr>
<tr>
<td>A.3</td>
<td>serious eye damage/eye irritation</td>
<td>Cat. 1 (Eye Dam. 1)</td>
</tr>
</tbody>
</table>

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).

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
Safety Data Sheet
acc. to OSHA, Appendix D to § 1910.1200
Concrete- Orange Turns Green

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

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium carbonate</td>
<td>CAS No 497-19-8</td>
<td>10 - &lt; 25</td>
<td>A.2 Skin Corr. 1A, A.3 Eye Dam. 1</td>
<td>H314 H318</td>
</tr>
<tr>
<td>trisodium phosphate</td>
<td>CAS No 10101-89-0</td>
<td>5 - &lt; 10</td>
<td>A.2 Skin Irrit. 2, A.3 Eye Irrit. 2A, A.8R STOT SE 3</td>
<td>H315 H319 H335</td>
</tr>
<tr>
<td>Alcohols, C9-11 ethoxylated</td>
<td>CAS No 68439-46-3</td>
<td>1 - &lt; 5</td>
<td>A.3 Eye Dam. 1</td>
<td>H318</td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.
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.
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

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.
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)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>particulates not otherwise regulated (PNOR)</td>
<td></td>
<td>PEL</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>29 CFR OSHA</td>
</tr>
<tr>
<td>US</td>
<td>particulates not otherwise regulated (PNOR)</td>
<td></td>
<td>PEL</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>29 CFR OSHA</td>
</tr>
</tbody>
</table>

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.
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 \text{mg/l} water at 25 \degree C (base)
Melting point/freezing point not determined
Initial boiling point and boiling range 260 \degree C
Flash point not applicable (closed cup)
Evaporation rate not determined
Flammability (solid, gas) not determined
Explosion limits of dust clouds not determined
Vapor pressure 0.0089 Pa at 25 \degree C
Density not determined
Relative density Information on this property is not available.
Solubility(ies)
Water solubility miscible in any proportion
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.
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

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium carbonate</td>
<td>497-19-8</td>
<td>LC50</td>
<td>300 mg/L</td>
<td>fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>497-19-8</td>
<td>EC50</td>
<td>227 mg/L</td>
<td>aquatic invertebrates</td>
<td>48 hours</td>
</tr>
<tr>
<td>trisodium phosphate</td>
<td>10101-89-0</td>
<td>LC50</td>
<td>440 mg/L</td>
<td>bluegill</td>
<td>96 hours</td>
</tr>
<tr>
<td>trisodium phosphate</td>
<td>10101-89-0</td>
<td>LC50</td>
<td>260 mg/L</td>
<td>Oncorhynchus mykiss (rainbow trout)</td>
<td>96 hours</td>
</tr>
<tr>
<td>trisodium phosphate</td>
<td>10101-89-0</td>
<td>EC50</td>
<td>&gt;1000 mg/L</td>
<td>daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td>Alcohols, C9-11 ethoxylated</td>
<td>68439-46-3</td>
<td>LC50</td>
<td>7 mg/L</td>
<td>fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>Alcohols, C9-11 ethoxylated</td>
<td>68439-46-3</td>
<td>EC50</td>
<td>2.5 mg/L</td>
<td>aquatic invertebrates</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

Aquatic toxicity (chronic)
**Aquatic toxicity (chronic) of components of the mixture**

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium carbonate</td>
<td>497-19-8</td>
<td>LC50</td>
<td>385 mg/l</td>
<td>fish</td>
<td>24 h</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>497-19-8</td>
<td>EC50</td>
<td>403 mg/l</td>
<td>aquatic invertebrates</td>
<td>24 h</td>
</tr>
</tbody>
</table>

12.2 **Process of degradability**
Data are not available.

12.3 **Bioaccumulative potential**
Data are not available.

**Bioaccumulative potential of components of the mixture**

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>BCF</th>
<th>Log KOW</th>
<th>BOD5/COD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C9-11 ethoxylated</td>
<td>68439-46-3</td>
<td></td>
<td>3.75</td>
<td></td>
</tr>
</tbody>
</table>

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.
# SECTION 14: Transport information

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>1759</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>CORROSIVE SOLID, N.O.S.</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>Class 8 (corrosive substances)</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>III (substance presenting low danger)</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>none (non-environmentally hazardous acc. to the dangerous goods regulations)</td>
</tr>
</tbody>
</table>

**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.

**14.8 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

  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
Concrete- Orange Turns Green

Hazardous Materials Identification System (American Coatings Association)

International Civil Aviation Organization (ICAO-IATA/DGR)
- UN number: 1759
- Proper shipping name: Corrosive solid, n.o.s.
- Class: 8
- Packing group: III
- Danger label(s): 8
- Special provisions (SP): A3
- Excepted quantities (EQ): E1
- Limited quantities (LQ): 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 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)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td>/</td>
<td>None.</td>
</tr>
<tr>
<td>Health</td>
<td>3</td>
<td>Major injury likely unless prompt action is taken and medical treatment is given.</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td>Materials that must be preheated before ignition can occur.</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>0</td>
<td>Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.</td>
</tr>
<tr>
<td>Personal protective equipment</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

NFPA® 704
### Concrete - Orange Turns Green

#### Safety Data Sheet

**acc. to OSHA, Appendix D to § 1910.1200**

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

**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**

- 2

**Hazard class and category**

- (Eye Irrit. 2)

### SECTION 16: Other information

#### 16.2 Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 CFR US DOT</td>
<td>49 CFR § 40 U.S. Department of Transportation</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>BCF</td>
<td>BioConcentration Factor</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical Oxygen Demand</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>COD</td>
<td>chemical oxygen demand</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>EmS</td>
<td>Emergency Schedule</td>
</tr>
<tr>
<td>ERG No</td>
<td>Emergency Response Guidebook - Number</td>
</tr>
<tr>
<td>Eye Dam.</td>
<td>seriously damaging to the eye</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>irritant to the eye</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IARC Monographs</td>
<td>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
</tbody>
</table>
16.3 Key literature references and sources for data

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)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H314</td>
<td>causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>may cause respiratory irritation</td>
</tr>
</tbody>
</table>

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.