



SAFETY DATA SHEET

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|---|---|
| FOR ANY EMERGENCY, 24 HOURS/7 DAYS, CALL: | 1-800-222-1222 |
| FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®: | 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) |
| FOR ALL SDS QUESTIONS & REQUESTS, CALL: | 1-844-692-4772 |

PRODUCT NAME: pHin™ Orange Pods, pH Up for Pools

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier

ConnectedYard Inc.
380 Portage Avenue
Palo Alto, CA 94306 USA

Telephone: +18446924772
Web: www.phin.co

DATE CREATED: 3/1/2017

MSDS Number: 000000022150
SYNONYMS: Soda Ash
CHEMICAL FAMILY: Carbonate
DESCRIPTION/USE: pH adjuster for pools and spas
FORMULA: Na₂CO₃

Manufacturer


Advantis Technologies
1200 Bluegrass Lakes Parkway
Alpharetta, GA 30004 USA

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

| | | |
|---|---|---------------------------------|
| Acute toxicity (Inhalation) | : | Category 4 |
| Eye irritation | : | Category 2A |
| Specific target organ toxicity - single exposure | : | Category 3 (Respiratory system) |

GHS label elements

| | | |
|-------------------|---|---|
| Hazard pictograms | : |  |
| Signal word | : | Warning |



Hazard statements : H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye protection/ face protection.

Response:
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>CAS OR CHEMICAL NAME</u> | <u>CAS # %</u> | <u>RANGE</u> |
|-----------------------------|----------------|---------------|
| Sodium carbonate | 497-19-8 | 99.8 - 100.00 |

Specific percentages of composition have been withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.



Skin Contact: IF ON SKIN: Immediately flush skin with plenty of water for 15 minutes. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use. Seek medical attention.

Eye Contact: IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

Ingestion: IF SWALLOWED: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible, pyrophoric or explosive.

Flammable Properties

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Fire / Explosion Hazards: Material will not ignite or burn.

Extinguishing Media: Choose extinguishing media suitable for surrounding materials.

Fire Fighting Instructions: In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

Hazardous Combustion Products: Carbon dioxide (CO₂), Sodium oxides

Upper Flammable / Explosive Limit, % in air: Not applicable

Lower Flammable / Explosive Limit, % in air: Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.

Spill Mitigation Procedures

Air Release: Dusting from this product could occur. Contain all solids for treatment or disposal. Keep people away from and upwind of spill/leak.

Water Release: This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Contain all solids for treatment or disposal.

Land Release: Sweep up and place in suitable clean, dry containers for reclamation or later disposal. Do not place spill materials back in their original containers. After removal, flush contaminated area thoroughly with water. Contain all solids for treatment or disposal.



Additional Spill Information: Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

SECTION 7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing dust from this material.

Storage: Store in a cool, dry place. Isolate from incompatible materials.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials." Refer to Section 10, "Incompatible Materials."

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation is recommended if significant dusting occurs. Otherwise use general exhaust ventilation.

Protective Equipment for Routine Use of Product

Respiratory Protection: Respiratory protection not normally needed. If dusting occurs, wear a NIOSH approved respirator.

Respirator Type: Wear a NIOSH approved N95 respirator.

Skin Protection: Wear impervious gloves to avoid skin contact. A safety shower should be provided in the immediate work area.

Eye Protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.

Protective Clothing Type: Natural Rubber, Neoprene, Nitrile

Components with workplace control parameters
no data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid

Form: granular

Color: white

Odor: none

Molecular Weight: 105.99 g/mol

Relative density: no data available

pH: 11.4

Boiling Point: Not applicable

0 1% in water



| | |
|--|--|
| Density: | 1.0400 g/cm ³ |
| Vapor Pressure: | Not applicable |
| Vapor Density: | Not applicable |
| Viscosity: | Not applicable |
| Fat Solubility: | no data available |
| Solubility in Water: | 212.5 g/l @ 20 Deg. C |
| Partition coefficient n-octanol/water: | Not applicable |
| Evaporation Rate: | Not applicable |
| Oxidizing: | no data available |
| Volatiles, % by vol.: | Not applicable |
| VOC Content: | no data available. This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450. |
| HAP Content: | no data available |

SECTION 10. STABILITY AND REACTIVITY

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|-----------------------------------|--|
| Stability and Reactivity Summary: | Stable under normal conditions. Not sensitive to mechanical shock. Not sensitive to static discharge. Product will not undergo hazardous polymerization. |
| Conditions to Avoid: | High temperatures, Exposure to moist air or water |
| Chemical Incompatibility: | Aluminum powder, Acids |
| Hazardous Decomposition Products: | Carbon dioxide (CO ₂), Sodium oxides |
| Decomposition Temperature: | 400 °C - |

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

| | | |
|------------------|--------------------|-----|
| Sodium carbonate | LD50 = 4,090 mg/kg | Rat |
|------------------|--------------------|-----|

Component Animal Toxicology

Dermal LD50 value:

| | | |
|------------------|-----------------------------------|--------|
| Sodium carbonate | LD50 Believed to be > 2,000 mg/kg | Rabbit |
|------------------|-----------------------------------|--------|

Component Animal Toxicology

Inhalation LC50 value:

| | | |
|------------------|---------------------|-----|
| Sodium carbonate | LC50 1 h = 4.6 mg/l | Rat |
|------------------|---------------------|-----|

Product Animal Toxicity

Oral LD50 value:

| | | |
|--|--------------------|-----|
| | LD50 = 4,090 mg/kg | Rat |
|--|--------------------|-----|



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|--|---|--------|
| <u>Dermal LD50 value:</u> | LD50 Believed to be > 2,000 mg/kg | Rabbit |
| <u>Inhalation LC50 value:</u> | Inhalation LC50 1 h = 4.6 mg/l | Rat |
| Skin Irritation: | May cause mild skin irritation. | |
| Eye Irritation: | Moderate eye irritant | |
| Skin Sensitization: | This material is not known or reported to be a skin or respiratory sensitizer. | |
| Acute Toxicity: | Contact with the eyes and mucous membranes causes transient irritation. Minor corneal involvement may occur if product is not rinsed immediately from the eyes. Inhalation may cause irritation. Contact with skin causes irritation. | |
| Subchronic / Chronic Toxicity: | Damage to lungs has been observed in laboratory animals from repeated inhalation of high concentrations (70 mg/m3). This damage is characterized by thickening of the walls of the air sacs and a low grade of pulmonary inflammation. The risk to human health is low due to the high concentration required to produce the effect. Repeated or prolonged skin contact with this product may cause dermatitis and blistering. | |
| Sodium carbonate | Male rats were exposed to an aerosol of 2% aqueous solution of this chemical, 4 hr.day, 5 days/week for 3-1/2 months. No effect was observed at a concentration of 10 or 20 mg/cubic meter. At 70 mg/cubic meter weight gain was decreased and the lungs showed thickening of the intra-alveolar walls, hyperemia, and lymphoid infiltration. Repeated or prolonged skin contact with this product may cause dermatitis and blistering. | |
| Reproductive and Developmental Toxicity: | This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen. | |
| Sodium carbonate | This chemical has been tested in laboratory animals and no evidence of teratogenicity was seen. | |
| Mutagenicity: | This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test. | |
| Sodium carbonate | This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test. | |
| Carcinogenicity: | This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. | |



SECTION 12. ECOLOGICAL INFORMATION

Overview: Practically non-toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: Sodium carbonate

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|--------------------------------------|---|
| Pimephales promelas (fathead minnow) | - (nominal, static). 96 h LC50 < 850 mg/l |
| Bluegill | - (nominal, static). 96 h LC50 = 320 mg/l |
| Mosquito fish | - (nominal, static). 96 h LC50 = 740 mg/l |
| Daphnia magna | - (nominal, static). 48 h LC50= 265 mg/l |
| Ceriodaphnia dubia | - (nominal) 48 h EC50= 199.82 mg/l |
| Navicula seminulum (diatom) | - (nominal, static). 96 h EC50 = 242 mg/l |

SECTION 13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary: If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

Disposal Methods: As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes: Not applicable

SECTION 14. TRANSPORT INFORMATION

DOT
Not dangerous goods
TDG
Not dangerous goods
IATA
Not dangerous goods
IMDG-CODE
Not dangerous goods



SECTION 15. REGULATORY INFORMATION

WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects
D1B: Toxic Material Causing Immediate and Serious Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Sodium carbonate 497-19-8

New Jersey Right To Know

Sodium carbonate 497-19-8

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



The components of this product are reported in the following inventories:

TSCA : The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. CONNECTEDYARD INC. BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT CONNECTEDYARD MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.