Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ Shock Treatment

Revision date 10-10-16

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

Product ID: Shock Treatment

Chemical Name and Synonyms: Potassium Monopersulfate Compound

Chemical Formula: Proprietary
Chemical Family: Peroxygen Salt

Product Use: Safe, Effective, Shock Oxidizer Treatment

Supplier: Oreq Corporation Distributor: Carefree Stuff

42306 Remington Ave. 5220 4th Street, Ste 2 Temecula, CA 92532 Irwindale, CA 91706 951-296-5076 626-337-0611

Emergency Telephone# CHEMTREC 800-424-9300

Product hazard category

Acute toxicity (Oral)

Skin corrosion

Serious eye damage/eye irritation

Category 4

Category 1B

Category 1

SIGNAL WORD: DANGER

HAZARD PICTOGRAMS:



Hazardous prevention: P260- Do not b

measures

P260- Do not breathe dust or mist.

P264- Wash skin thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel

unwell.

P301+330+331- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361+353- IF ON SKIN (or hair): Remove/ Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

P304+312- IF INHALED: Remove victim to fresh air and keep comfortable for breathing. P305+351+338- IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P307+311- Immediately call a POISON CENTER or doctor/ physician. P362+364- Take off contaminated clothing and wash it before reuse.

P405- Store locked up.

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

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ Shock Treatment

Revision date 10-10-16

| COMPONENT | % | CAS# |
|--------------------------|--------|-------------|
| Potassium Monopersulfate | 32.18% | 70693-62-8 |
| Inert ingredients | 67.82% | Proprietary |

The exact formulation is being withheld as a trade secret.

While some substances are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.12009i), all known hazards are clearly communicated within this document.

General advice: When symptoms persist or in all cases of doubt seek medical advice.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial

respiration, preferably by mouth to mouth, if possible. Call a poison control center or doctor

for further treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call a poison control center or doctore for treatment advice.

immediately. Wash contaminated clothing before re-use.

Eye contact : Hold Eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact

lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control

center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a

glass of water if able to swallow. Do NOT induce vomiting. Do not give anything by mouth to

an unconscious person.

Most important:

symptoms/effects, acute

and delayed

No applicable data available.

Protection of first-aiders: No applicable data available.

Notes to physician : No applicable data available.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and

the surrounding environment.

Unsuitable extinguishing

media:

Carbon dioxide (CO2)

Specific hazards: The product itself does not burn.

Hazardous decomposition products Oxygen, Sulphur dioxide, Sulfur trioxide

Special protective equipment

for firefighters:

Wear self-contained breathing apparatus and protective suit.

Further information : No applicable data available.

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ Shock Treatment

Revision date 10-10-16

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with

clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel): Evacuate personnel to safe areas. Use personal protective equipment.

Environmental precautions: Try to prevent the material from entering drains or water courses.

Spill Cleanup: Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

After cleaning, flush away traces with water.

Accidental Release Measures: Try to prevent the material from entering drains or water courses. Dispose of in

accordance with local regulations.

Handling: Use only in well-ventilated areas. Do not breathe dust. Avoid dust formation in

confined areas. Avoid contact with skin and eyes. Keep away from heat and flame.

Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice

Handling (Physical Aspects): No applicable data available.

Dust explosion class:No applicable data available.

Storage: Keep in a dry, cool and well-ventilated place. Protect from contamination.

Store in original container.

Keep away from: Combustible material Never allow product to get in contact with

water during storage.

Stable under recommended storage conditions.

Storage period:Storage temperature:
No applicable data available.
No applicable data available.

Engineering controls: Ensure adequate ventilation.

Personal protective equipment

Respiratory protection: When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

Hand protection: Material: Impervious gloves

Eye protection : Wear safety glasses or coverall chemical splash goggles.

Skin and body protection: Where there is potential for skin contact, have available and wear as appropriate, impervious

gloves, apron, pants, jacket, hood and boots. Remove and wash contaminated clothing

before re-use.

Protective measures: When using do not eat or drink. Do not breathe dust.

Exposure Guidelines

Exposure Limit Values

Potassium Monopersulfate-

Pentapotassium bis(peroxymonosulphate) bis(sulphate) AEL * (DUPONT) 1 mg/m3 15 minute TWA

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Mineral Buddies™ Shock Treatment **Product name**

Revision date 10-10-16

Dipotassium peroxodisulphate

TLV (ACGIH) 0.1 mg/m3 TWA as persulfate

Potassium sulfate

10 mg/m3 AEL * (DUPONT) 8 hr. TWA

Appearance (Physical state, form, colour, etc.)

: Solid form, granular **Form**

Color : white Odor : none

Odor threshold : No applicable data available.

: 2.1 at 30 g/l 20 °C (68 °F)

Melting point/freezing point : Melting point

Decomposes before melting.

Boiling point/boiling range : Boiling point

Not applicable : does not flash

Flash point **Evaporation rate**

: No applicable data available.

Flammability (solid, gas) : The product itself does not burn, but it is slightly oxidising (active oxygen

content ca. 2%).

The product is not flammable. : No applicable data available. : No applicable data available.

Lower explosion limit Vapor pressure : < 0.0000017 hPa

Vapour density : No applicable data available.

: No applicable data available. Density : 2.35 at 20 °C (68 °F)

Specific gravity (Relative

Upper explosion limit

density)

Bulk density : 1,100 - 1,400 kg/m3

Water solubility : 297 - 357 g/l at 22 °C (72 °F)

: No applicable data available.

Solubility(ies) Partition coefficient: n-: No applicable data available.

octanol/water

Ignition temperature : no data available

Auto-ignition temperature: No applicable data available. Decomposition temperature: No applicable data available. **Viscosity** : No applicable data available.

Oxidizing Substance : The substance or mixture is not classified as oxidizing.

Reactivity: Stable under recommended storage conditions.

Stable under normal conditions. Stability:

Possibility of hazardous reactions No applicable data available.

^{*} AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ Shock Treatment

Revision date 10-10-16

Conditions to avoid: Temperature > 50 °C (> 122 °F) Avoid extreme heat.

Incompatibility: Halogenated compounds Cyanides, Heavy metal salts

Hazardous decomposition products: Oxygen , Sulfur dioxide, Sulfur trioxide products

Potassium Monopersulfate

Monopersulfate compound

Inhalation 4 h LC50: > 5 mg/l, rat

Skin irritation: Species: rabbit, Causes burns. **Eye irritation:** Species: rabbit, Severe eye irritation

Sensitisation: Species: guinea pig, Did not cause sensitization on laboratory animals.

May cause sensitization of susceptible persons by skin contact or by inhalation of

dust.

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

Dermal LD50: > 11,000 mg/kg, rabbit

Oral LD50: 200 - 2,000 mg/kg, rat Gastrointestinal ulceration Internal bleeding

Repeated dose toxicity: Inhalation

Eyes, corneal damage, Reversible

Oral

Stomach, Pathologic changes

Mutagenicity: Did not cause genetic damage in cultured bacterial cells., Tests on mammalian cell cultures showed

mutagenic effects., Evidence suggests this substance does not cause genetic damage in animals.

Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those

causing maternal toxicity.

Dipotassium peroxodisulphate

Dermal LD50: > 10,000 mg/kg , Rabbit **Oral LD50:** 1,130 mg/kg , Rat

Repeated dose toxicity: Oral Rat-

NOAEL: 131.5 mg/kgMethod: OECD Test Guideline 407

No toxicologically significant effects were found.

Carcinogenicity: Not classifiable as a human carcinogen.

Animal testing did not show any carcinogenic effects. Information given is based on

data obtained from similar substances.

Mutagenicity: Animal testing did not show any mutagenic effects. Tests on bacterial or

mammalian cell cultures did not show mutagenic effects. Information given is based

on data obtained from similar substances.

Reproductive toxicity: No toxicity to reproduction Animal testing showed no reproductive toxicity.

Information given is based on data obtained from similar substances.

Teratogenicity: Animal testing showed no developmental toxicity. Information given is based on

data obtained from similar substances.

Tetra[carbonato(2-)]dihydroxypentamagnesium

Oral LD50: > 2,000 mg/kg , Rat

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ Shock Treatment

Revision date 10-10-16

Information given is based on data obtained from similar substances.

Repeated dose toxicity: Oral, Rat

- 90 d

NOAEL: 1,531 mg/kgMethod: OECD Test Guideline 408

No toxicologically significant effects were found., Information given is based on data

obtained from similar substances.

Carcinogenicity: Not classifiable as a human carcinogen. Information given is based on data

obtained from similar substances. Animal testing did not show any carcinogenic

effects.

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Evidence suggests this substance does not cause genetic damage in animals.

Information given is based on data obtained from similar substances.

Reproductive toxicity: No toxicity to reproduction Information given is based on data obtained from similar

substances. Animal testing showed no reproductive toxicity.

Teratogenicity: Information given is based on data obtained from similar substances. Animal testing

showed no developmental toxicity.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

Potassium Monopersulfate

Aquatic Toxicity

Pentapotassium bis(peroxymonosulphate) bis(sulphate)

96 h LC50: Cyprinodon variegatus (sheepshead minnow) 1.09 mg/l Directive 67/548/EEC, Annex V, C.1.

96 h ErC50: Selenastrum capricornutum (green algae) > 1 mg/l OECD Test Guideline 201

72 h NOEC: Selenastrum capricornutum (green algae) 0.5 mg/l

48 h EC50: Daphnia magna (Water flea) 3.5 mg/l OECD Test Guideline 202 NOEC Cyprinodon variegatus (sheepshead minnow) 0.222 mg/l

28 d: NOEC Americamysis bahia (mysid shrimp) 0.267 mg/l

Dipotassium peroxodisulphate

96 h LC50: Oncorhynchus mykiss (rainbow trout) 76.3 mg/l US EPA Test Guideline OPP 72-1

Information given is based on data obtained from similar substances.

72 h EbC50: Pseudokirchneriella subcapitata (green algae) 83.7 mg/l OECD Test Guideline 201

Information given is based on data obtained from similar substances.

72 h NOEC: Pseudokirchneriella subcapitata (green algae) 39.2 mg/l OECD Test Guideline 201

Information given is based on data obtained from similar substances.

48 h EC50: Daphnia magna (Water flea) 120 mg/l US EPA Test Guideline OPP 72-2

Information given is based on data obtained from similar substances.

Tetra[carbonato(2-)]dihydroxypentamagnesium

96 h LC50: Pimephales promelas (fathead minnow) 2,120 mg/l

Specifically Designed for Mineral Treated Spas

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Product name Mineral Buddies™ Shock Treatment

Revision date 10-10-16

Information given is based on data obtained from similar substances.

72 h EC50: Desmodesmus subspicatus (green algae) > 100 mg/l OECD Test Guideline 201

Information given is based on data obtained from similar substances.

72 h NOEC: Desmodesmus subspicatus (green algae) 100 mg/l OECD Test Guideline 201

Information given is based on data obtained from similar substances.

48 h EC50: Daphnia magna (Water flea) 140 mg/l

Information given is based on data obtained from similar substances.

Physico-chemical

removability: hydrolyses

Environmental Fate

Dipotassium peroxodisulphate

Biodegradability: Readily biodegradable.

Tetra[carbonato(2-)]dihydroxypentamagnesium

Biodegradability: The methods for determining biodegradability are not applicable to inorganic substances.

Waste Disposal Methods: Dispose of in accordance with local regulations.

Contaminated Packaging: If recycling is not practicable, dispose of in compliance with local regulations.

DOT UN-Number: 3260

Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s.

(Monopersulfate Compound)

Class: 8

Packaging group: II Labeling No.: 8

IATA C UN number: 3260

Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s.

(Monopersulfate Compound,)

Class: 8

Packaging group: II Labeling No.: 8

IMDG UN number: 3260

Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

(Monopersulfate Compound,)

Class: 8

Packaging group: II Labeling No.: 8

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Mineral Buddies™ Shock Treatment **Product name**

Revision date 10-10-16

Title III hazard

Classification

TSCA : On the inventory, or in compliance with the inventory

Other regulations : Active Ingredient in this composition is POTASSIUMPEROXYMONOSULFATE,

> CAS. No. 10058-23-8, Concentration: 43-47% (Typical 45%) Active ingredient may also be described by the synonym POTASSIUM MONOPERSULFATE. : This material does not contain any chemical components with known CAS

SARA 313 Regulated numbers that exceed the threshold (De Minimis) reporting levels established Chemical(s)

by SARA Title III, Section 313.

PA Right to Know : Substances on the Pennsylvania Hazardous Substances List present at a Regulated Chemical(s)

concentration of 1% or more (0.01% for Special Hazardous Substances):

Dipotassium peroxodisulphate

NJ Right to Know : Substances on the New Jersey Workplace Hazardous Substance List present

Regulated Chemical(s) at a concentration of 1% or more (0.1% for substances identified as

carcinogens, mutagens or teratogens): Dipotassium peroxodisulphate,

Potassium hydrogensulphate : Acute Health Hazard: Yes Chronic Health Hazard: No

Fire: No.

Reactivity/Physical hazard: No

Pressure: No

California Prop. 65: Chemicals known to the State of California to cause cancer, birth defects or any

other harm: none known

DATE OF PREPARATION 10-10-2016

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Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ pH & Alk Up

Revision date 10-10-16

Section 1 Identification

Product ID: pH Plus

Chemical Name: Sodium Carbonate, Anhydrous

Synonyms: Sodium carbonate; Carbonic acid, disodium salt; Disodium carbonate

Chemical Formula: NA2CO3 CAS Number: 497-19-8

Product Use: Raises pH, Prevents Corrosion

Supplier: Oreg Corporation Distributor: Carefree Stuff

42306 Remington Ave. 5220 4th Street, Ste 2 Temecula, CA 92590 Irwindale, CA 91702 951-296-5076 626-337-0611

Emergency Telephone# Chemtrec: 1-800-424-9300

Section 2 Hazards identification

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 FR 1910.1200)

GHS CLASSIFICATION: Serious eye damage/eye irritation- Category 2

GHS SIGNAL WORD: WARNING



HAZARD PICTOGRAMS:

HAZARD STATEMENT(S):

H319 - Causes serious eye irritation

PRECAUTIONARY STATEMENT(S)- Prevention:

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

PRECAUTIONARY STATEMENT(S)- Response:

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

May be harmful if swallowed

Section 3 Composition / Information on ingredients

Ingredients

| Chemical Name | CAS-No | Weight % |
|------------------|----------|----------|
| Sodium carbonate | 497-19-8 | 100 |

Formula NA2CO3
Chemical Family Alkali salt

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ pH & Alk Up

Revision date 10-10-16

Section 4 First - aid measures

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms

persist, call a physician.

Skin contact Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Remove and wash contaminated clothing before re-use.

Inhalation Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed:

Causes serious eye damage / eye irritation.

Indication of immediate medical attention and special treatment needed, if necessary:

Treat symptomatically

Section 5 Fire - fighting measures

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire.

Specific Hazards Arising from the

Chemical

Non-combustible, substance itself does not burn but may decompose upon

heating to produce corrosive and/or toxic fumes.

Fumes of sodium oxide. Carbon oxides (COx)

Hazardous combustion products

Explosion Data
Sensitivity to Mechanical Impact

Not sensitive.

Protective equipment and precautions for firefighters

Sensitivity to Static Discharge

As in any fire, wear self-contained breathing apparatus pressure demand

MSHA/NIOSH (approved or equivalent) and full protective gear

Section 6 Accidental release measures

Personal precautions Avoid dust formation. Sweep up to prevent slipping hazard.

Other For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product

and Company Identification" above.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for containment Prevent large quantities of this product from contacting vegetation or waterways. Cover

with plastic sheet to prevent spreading. Pick up and transfer to properly labeled containers.

Keep in suitable and closed containers for disposal.

Methods for cleaning up Pick up and transfer to properly labeled containers. Keep in suitable and closed containers

for disposal. Dispose of waste as indicated in Section 13.

Section 7 Handling and storage

Handling Use air conveying/mechanical systems for bulk transfer to storage. Provide appropriate exhaust

ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory

equipment if release of airborne dust is expected.

Storage Store in original container. Keep in properly labeled containers. Keep containers tightly closed.

Incompatible products Aluminum. Powdered aluminum. Acids

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ pH & Alk Up

Revision date 10-10-16

Section 8 Exposure controls / personal protection

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies Local nuisance dust standards apply.

Appropriate engineering controls

Engineering measures Where reasonably practicable this should be achieved by the use of local exhaust ventilation

and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and Body Protection Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Nitrile rubber, Neoprene gloves

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

General information These recommendations apply to the product as supplied

Section 9 Physical and chemical properties

Appearance Granules
Color White
Physical state Solid
Odor odorless
Odor Threshold not applicable

pH 11.4 (as aqueous solution)

Melting Point/Range 851 °C

Freezing point No information available

Boiling Point/Rangenot applicableFlash PointNot combustibleEvaporation rateNot applicable

Flammable (solid, gas)

Non-combustible, substance itself does not burn but may decompose upon heating to

produce corrosive and/or toxic fumes

Flammability Limit in Air

Upper flammabilitylimit:No information availableLower flammabilitylimit:No information availableVapor pressureNo information availableVapor densityNo information availableDensityNo information available

Specific gravity 2.52

Water solubility 212.5 g/L @ 20 °C Solubility in other solvents No information available

Partition coefficient: Not applicable
Autoignition Temperature Not combustible

Decomposition Temperature 400 °C

SAFETY DATA SHEET

mineral buddies

Specifically Designed for Mineral Treated Spas

Product name Mineral Buddies™ pH & Alk Up

Revision date 10-10-16

Section 9 Physical and chemical properties (Continued)

Viscosity. kinematic
Viscosity, dynamic
No information available
No information available

Explosive properties Not explosive Non-oxidizing

Molecular Weight 105.99

Bulk density 0.86 - 1.12 g/cm³ (Dense grades) 0.70 - 0.90 g/cm³ (Light Grades)

Kst 0 bar m/s

Section 10 Stability and reactivity

Reactivity None under normal use conditions.

Chemical Stability Stable. Decomposes by reaction with strong acid.

Possibility of Hazardous ReactionsNone under normal processing.

Hazardous polymerizationHazardous polymerization does not occur.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Aluminium. Powdered aluminum. Acids.

Hazardous Decomposition Products Sodium oxides. Carbon oxides (COx).

Section 11 Toxicological information

Product Information

LD50 Oral 2,800 mg/kg (rat) **LD50 Dermal** > 2,000 mg/kg (rabbit)

LC50 Inhalation 2.3 mg/L (rat)

Eye Contact Irritating to eyes. **Skin Contact** Non-irritating

Sensitization Patch test on human volunteers did not demonstrate sensitization properties.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity No known effect.

Mutagenicity No information available

Carcinogenicity Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ pH & Alk Up

Revision date 10-10-16

Section 12 Ecological information

Ecotoxicity

| Sodium carbonate (497-19-8) | | | | | | |
|-----------------------------|-----------|------------------|---------|-------|--|--|
| Active Ingredient(s) | Duration | Species | Value | Units | | |
| Sodium Carbonate | 96 h LC50 | Bluegill sunfish | 300 | mg/L | | |
| Sodium Carbonate | 48 h EC50 | Ceriodaphnia | 200-227 | mg/L | | |

Persistence and degradability Biodegradability does not pertain to inorganic substances. .

Bioaccumulation Does not bioaccumulate. **Mobility** Dissociates into ions.

Other adverse effects None known

Section 13 Disposal considerations

Waste disposal methods This material, as supplied, is not a hazardous waste according to Federal regulations (40

CFR 261). Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations.

Section 14 Transport information

DOT Not regulated

TDG Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

Section 15 Regulatory information

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard YES
Chronic Health Hazard NO
Fire Hazard NO
Sudden Release of Pressure Hazard NO
Reactive Hazard NO

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ pH & Alk Up

Revision date 10-10-16

Section 15 Regulatory information (Continued)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

International Inventories

| COMPONENT | TSCA (United States) | DSL (Canada) | EINECS/ELI NCS (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|------------------------------------|----------------------------|-----------------|-------------------------------|-----------------|------------------|-----------------|------------------------|---------------------|
| Sodium Carbonate 497-19-8 (100) | Х | X | X | X | X | X | X | X |

International Regulations

Mexico – Grade Moderate risk, Grade 2

WHMIS Hazard Class D2B Toxic materials, Eye irritation

Class E: Corrosive to aluminum. Not corrosive to animal skin or carbon steel.

Section 16 Other information

| NFPA | Health Hazard 2 | Flammability 0 | Stability 0 | Special Hazards - |
|------|-----------------|----------------|-------------|----------------------|
| HMIS | Health Hazard 2 | Flammability 0 | Stability 0 | Special Protection X |

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

DATE OF PREPARATION 5-15-15

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Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

Product name Mineral Buddies™ pH & Alk Down

Revision date 10-10-16

Section 1 Identification

> pH & Alk Down Product ID:

Synonyms: Sodium bisulfate, anhydrous.

Nitre cake, GBS, Sodium hydrogen sulphate

Product Use: Lowers pH, Prevents Scaling

Supplier: **Oreq Corporation** Distributor: Carefree Stuff

> 42306 Remington Ave. Temecula, CA 92590 951-296-5076

Irwindale, CA 91702 626-337-0611

5220 4th Street, Ste 2

CHEMTREC, U.S.: 1-800-424-9300 **Emergency Phone#**

Section 2 Hazards identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the

substance or mixture:

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements Hazard pictograms:



Signal word: Danger

Hazard statements: H318 - Causes serious eye damage.

Precautionary statements

Prevention: P280 - Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several Response:

minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or physician.

Not applicable. Storage: Not applicable. Disposal:

Hazards not otherwise

Classified : None known.

Section 3 **Composition / Information on ingredients**

United States - Mexico

| Name | % | CAS number |
|------------------|-----|------------|
| Sodium bisulfate | >90 | 7681-38-1 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section

Specifically Designed for Mineral Treated Spas

SAFETY DATA SHEET

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Section 4 First - aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. If redness or irritation persists, get prompt medical attention.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

If irritation or discomfort persists, seek medical attention.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 20 minutes.

If skin irritation occurs, seek medical attention.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by

medical personnel. Never give anything by mouth to an unconscious person. Call

medical doctor or poison control center immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: Inhalation of dust may irritate nose, throat and/or lungs.

Skin contact: Prolonged exposure may cause skin irritation.

Ingestion : Small amounts (tablespoonful) swallowed are not likely to cause injury; however,

swallowing large amounts may irritate or burn digestive tract.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation :No known significant effects or critical hazards.

Skin contact :Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur if repeated exposure

Ingestion :Adverse symptoms may include the following:

stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

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Fire - fighting measures Section 5

Extinguishing media

Suitable Extinquishing

Media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinquishing

Media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:

Sulfur oxides

Special protective actions

for fire-fighters

: No special measures are required.

Special protective equipment

for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

mode.

Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

: Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialized clothing is required to deal with the spillage, take note of any information inSection 8 on suitable and unsuitable materials. See also the

information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused

environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small Spill : Vacuum or sweep up material and place in a designated, labeled waste container.

Dispose of via a licensed waste disposal contractor.

Large Spill : Prevent entry into sewers, water courses, basements or confined areas. Vacuum

or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact

information and Section 13 for waste disposal.

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Section 7 Handling and Storage

Precautions for safe handling

Protective measures :Put on appropriate personal protective equipment (see Section 8). Avoid breathing

dusts. Wash thoroughly after handling.

Advice on general Occupational hygiene

:Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene

measures.

Conditions for safe storage, Including any incompatibilities

:Material is hygroscopic and will readily absorb moisture. DO NOT store dry product

where exposed to moist conditions. Keep container tightly closed.

Section 8 Exposure controls / personal protection

Control parameters

Occupational exposure limits

None Mexico None

Appropriate engineering

controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures,local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure

controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures : Ensure that eyewash stations and safety showers are close to the workstation

location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the

working period.

Eye/face protection : Safety eyewear should be used when there is a likelihood of exposure.

Recommended: Safety glasses with side shields.

Skin protection

Hand protection: Use gloves appropriate for work or task being performed. Recommended: Rubber

gloves.

Body protection : Cotton-blend coveralls

Other skin protection :Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Respiratory protection: In dusty atmospheres (>10 mg/m³), use a NIOSH-approved dust respirator.

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Section 9 Physical and chemical properties

Appearance

Physical state : Dry (Anhydrous) crystalline solid spherical shape beads.

Color : Off-white.

Odor : Fresh to pungent.
Odor Threshold : Not available

pH : <1 [Conc. (% w/w): 5%]

Boiling point : Not available.
Flash point : Not available.
Evaporation rate : Not available.
Flammability (solid, gas) : Not available.
Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure: Not available.Vapor density: Not available.

Relative density :1.28

Solubility : Partially soluble in the following materials: cold water and hot water.

Viscosity : Not available.
Volatility : Not available.

Section 10 Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : DO NOT store dry product where exposed to moist conditions.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, acids

and alkalis. DO NOT MIX dry or concentrated solutions of this product with concentrated solutions of chlorine bleach, ammonia cleansers or similar products.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Section 11 Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|------------|----------|
| Sodium bisulfate | LD50 Oral | Rat | 2800 mg/kg | - |

Irritation/Corrosion -There is no data availableSensitization -There is no data availableCarcinoαenicity -There is no data available

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Section 11 Toxicological information (Continued)

<u>Specific target organ toxicity (single exposure)</u> - There is no data available <u>Specific target organ toxicity (repeated exposure)</u> - There is no data available

Aspiration hazard- There is no data available

Information on the likely

: Dermal contact. Eye contact. Inhalation. Ingestion.

routes of exposure

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation: Inhalation of dust may irritate nose, throat and/or lungs.

Skin contact: Prolonged exposure may cause skin irritation.

Ingestion : Small amounts (tablespoonful) swallowed are not likely to cause injury; however,

swallowing large amounts may irritate or burn digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation :No known significant effects or critical hazards.

Skin contact :Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur if repeated exposure

Ingestion :Adverse symptoms may include the following:

stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects: No known significant effects or critical hazards.

Long term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards

Potential chronic health effects

General: No known significant effects or critical hazards.Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.Fertility effects: No known significant effects or critical hazards.

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Toxicological information (Continued) Section 11

Acute toxicity estimates

| Route | ATE value |
|-------|--------------|
| Oral | 3080.3 mg/kg |

Section 12 Ecological information

Toxicity There is data available. Persistence and degradability : There is no data available. Bioaccumulative potential : There is no data available.

Mobility in soil

Soil/water partition coefficient (Koc)

: There is no data available.

Other adverse effects

: This product readily dissolves in water to form a weak acid solution. A 0.05 percent or greater (by weight) solution of this product will likely be acutely harmful to aquatic

life.

Section 13 **Disposal considerations**

Disposal Methods

: The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Section 14 **Transport information**

| | DOT/MEX Classification | IMDG | IATA |
|---------------|------------------------|---------------|---------------|
| UN number | Not regulated | Not regulated | Not regulated |
| UN proper | - | - | - |
| Shipping name | | | |
| Transport | - | - | - |
| Hazard class | | | |
| Packing group | - | - | - |
| Environmental | No | No | No |
| hazards | | | |
| Additional | - | - | - |
| information | | | |

Special precautions for user

:Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not available.

Section 15 Regulatory information

U.S. Federal regulations

: TSCA 8 (a) CDR Exempt Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted.

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Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**

: Not Listed

Clean Air Act Section 602

Class I Substances

: Not Listed

Clean Air Act Section 602

Class II Substances

: Not Listed

DEA List I Chemicals

(Precursor Chemicals)

: Not Listed

DEA List II Chemicals (Essential Chemicals) : Not Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ: :Not applicable

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

| Name | % | Fire Hazard | Sudden Release of Pressure | Reactive | Immediate (acute) Health hazard | Delayed (chronic) Health hazard | |
|---------------------|-----|----------------|----------------------------------|----------|------------------------------------------|------------------------------------------|--|
| Sodium Bisulfate | >90 | No. | No. | No. | Yes. | No. | |

State regulations

Massachusetts : None of the components are listed. : None of the components are listed. **New York** : None of the components are listed. **New Jersey** Pennsylvania : None of the components are listed.

California Prop. 65

No products were found.

<u>Mexico</u>

Classification Health **Flammability** Reactivity 0 0

Section 16 Other information

DATE OF PREPARATION 5-15-2015

THE INFORMATION SUPPLIED ABOVE IS PRESENTED IN GOOD FAITH AND HAS BEEN DERIVED FROM SOURCES BELIEVED TO BE RELIABLE, HOWEVER, NO WARRANTY EXPRESSED OR IMPLIED IS EXTENDED REGARDING ITS ACCURACY OR THE RESULTS TO BE OBTAINED FROM ITS USE SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL. ALL RISKS ARE ASSUMED BY THE USER.

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SAFETY DATA SHEET

Product name Mineral Buddies™ Calcium Up

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Section 1 Identification

Product ID: Calcium Up

Chemical Name: Calcium Chloride Synonyms: Calcium Chloride Flake

CAS Number: 10043-52-4

Product Use: Raises Calcium, Prevents Corrosion

Supplier: Oreg Corporation Distributor: Carefree Stuff

42306 Remington Ave. 5220 4th Street, Ste 2 Temecula, CA 92590 Irwindale, CA 91702 951-296-5076 626-337-0611

Emergency Phone# - CHEMTREC: 800-424-9300

Section 2 Hazards identification

GHS CLASSIFICATION: Acute Oral Toxicity Category 4

Serious Eye Damage/Eye Irritation Category 2

GHS SIGNAL WORD: WARNING

HAZARD PICTOGRAMS:

Appearance: White Physical State: Flake Odor: Odorless

Hazard Statement(s)

H302 Harmful if swallowed H316 Causes mild skin irritation H319 Causes serious eye irritation

Precautionary Statement(s):

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if

you feel unwell P330 - Rinse mouth

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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Section 3 Composition / Information on ingredients

| Chemical Name | CAS-No | Weight % |
|--------------------|------------|----------|
| Calcium Chloride | 10043-52-4 | 74-100 |
| Water | 7732-18-5 | 0-26 |
| Sodium Chloride | 7647-14-5 | < 3 |
| Potassium Chloride | 7447-40-7 | < 3 |
| Magnesium Chloride | 7786-30-3 | < 0.5 |

Section 4 First - aid measures

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye

wide open while rinsing. Obtain medical attention if irritation persists.

Skin Contact: Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and

persists.

Inhalation: Move to fresh air. Get medical attention immediately if symptoms occur.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell Rinse mouth.

Notes to Physician: Treat symptomatically and supportively.

Section 5 Fire - fighting measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Specific Hazards Arising from the Chemical

Avoid generating dust, under certain conditions may cause respiratory irritation. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

None

Explosion Data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 Accidental release measures

Personal Precautions:

Avoid contact with the skin and the eyes. Use personal protective equipment. Avoid dust formation.

Environmental Precautions:

Prevent large spills from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12,

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Section 6 Accidental release measures (Continued)

Ecological Information.

Methods and Materials for Containment and Cleaning Up:

Small and large spills: Contain spilled material if possible. Collect in suitable and properly labeled containers. Flush residue with plenty of water. See Section 13, Disposal considerations, for additional information.

Section 7 Handling and storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and

accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Wash clothing before reuse. Always use cool water when dissolving Calcium Chloride. Heat evolved is

significant.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away

from incompatible substances. Store protected from moisture. Store below melting point.

Incompatible Products: Zinc, Bromine tri-fluoride, Methyl vinyl ether

Section 8 Exposure controls / personal protection

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------|-----------------------------------|---------------------------------|------------|
| Calcium Chloride | ACGIH - (TLV-TWA) Guidelne | OSHA (PEL-TWA) - Z-3 Mineral | - |
| 10043-52-4 | for nuisance particulate | Dusts, Inert or Nuisance dusts, | |
| | (inhalable particulate): 10 mg/m3 | (respirable fraction): 5 mg/m3 | |

Engineering Measures Provide local exhaust ventilations system. When there is a potential for exposure, an

emergency eyewash and safety shower should be provided within the immediate work area.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with non-flexible side shields or chemical goggles

Skin and Body Protection Hands and Feet:

Wear appropriate protective non-leather protective gloves and boots. Chemical protective gloves and boots such as PVC, Neoprene, or Heavy Nitrile are recommended. Leather products do not offer adequate protection and will dehydrate with resultant shrinkage and

possible destruction.

Body: Wear appropriate protective, impervious clothing.

Respiratory Protection A respirator is not indicated under normal operating conditions. Use of a NIOSH - approved

respirator (N95 or greater) should be based on the presence of nuisance dusts.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-

use. Provide regular cleaning of equipment, work area and clothing.

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Section 9 Physical and chemical properties

Physical State: Flake Appearance: white Odor: odorless

pH: 8-10 100 g/l aq.sol. Vapor Pressure: Not available. Vapor Density: Not available. Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: > 1600 deg C @ 760.0 **Freezing/Melting Point:** 782 deg C

Decomposition Temperature: Not available.

Solubility: 740 g/l water (20°C)

Specific Gravity/Density: Not available.

Molecular Formula: CaCl2 Molecular Weight: 110.99

Section 10 Stability and reactivity

Chemical Stability: Stable.

Conditions to Avoid: Dust generation, excess heat, exposure to moist air or water. **Incompatibilities with Other Materials:** Zinc, Bromine tri-fluoride, Methyl vinyl ether

Hazardous Decomposition Products: Hydrogen chloride, calcium oxide.

Hazardous Polymerization: Will not occur.

Section 11 Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract.

Skin Contact Irritating to eyes. **Skin Contact** May cause irritation. **Ingestion** Harmful if swallowed.

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------|----------------------|----------------------|-----------------------|
| Calcium Chloride | = 1000 mg/kg (Rat) | = 2630 mg/kg (Rat) | - |
| Potassium Chloride | = 2600 mg/kg (Rat) | - | - |
| Sodium chloride | = 3 g/kg (Rat) | > 10 g/kg (Rabbit) | > 42 g/m3 (Rat) 1 h |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause irritation to the respiratory system.

Delayed and immediate effects and also chronic effects from short and long term exposure

Eye damage/irritation Irritating to eyes.

SensitizationMutagenic Effects
No information available.
No information available.

Carcinogenicity Contains no ingredients above reportable

quantities listed as a carcinogen.

Reproductive ToxicitySTOT - single exposure
No information available.
No information available.

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Section 11 Toxicological information (Continued)

STOT - repeated exposure
Chronic Toxicity
Aspiration Hazard
No information available.
No information available.

Numerical measures of toxicity - Product

Acute Toxicity 0% of the mixture consists of ingredient(s) of

unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral

979 mg/kg; Acute toxicity estimate

LD50 Dermal

2630 mg/kg; Acute toxicity estimate

Section 12 Ecological information

Ecotoxicity

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|---------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------|
| Calcium Chloride 10043-52-4 | | LC50 96 h: = 10650 mg/L static (Lepomis macrochirus) | | LC50 48 h: = 2400 mg/L (Daphnia magna) |
| Potassium Chloride 7447-40-7 | EC50 72 h: = 2500 mg/L (Desmodesm us subspicatus) | LC50 96 h: 750-1020 mg/L static (Pimephales promelas) LC50 96 h: = 1060 mg/L static (Lepomis macrochirus) | | EC50 48 h: = 825 mg/L (Daphnia magna) EC50 48 h: = 83 mg/L Static (Daphnia magna) |
| Sodium chloride 7647-14-5 | | LC50 96 h: 5560 - 6080 mg/L flow-through (Lepomis macrochirus) LC50 96 h: = 12946 mg/L static (Lepomis macrochirus) LC50 96 h: 6020 - 7070 mg/L static (Pimephales promelas) LC50 96 h: = 7050 mg/L semi-static (Pimephales promelas) LC50 96 h: 6420 - 6700 mg/L static (Pimephales promelas) LC50 96 h: 4747 - 7824 mg/L flow-through (Oncorhynchus mykiss) | | EC50 48 h: = 1000 mg/L (Daphnia magna) EC50 48 h: 340.7 - 469.2 mg/L Static (Daphnia magna) |

Section 13 Disposal considerations

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40

CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local

regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

Section 14 Transport information

US DOT –Not RegulatedTDG –Not RegulatedMEX –Not Regulated

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Section 15 Regulatory information

International Inventories

TSCA Complies DSL Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Section 16 Other information

HMIS Rating
Health hazard: 1
Flammability: 0
Physical Hazard 1

NFPA Rating
Health hazard: 1
Fire Hazard: 0
Reactivity Hazard: 1

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