

KIT SDS COVER LETTER

Product name Clear Spa 104 Spa Solutions Spa Start-Up

Kit Part # SPASTARTBR

Revision date 1-12-17

ATTACHED -

SPASTARTBR

Kit Component SDS's - Qty 5

- 1. Clear Spa 104 Bromo Bright Tabs
- 2. Clear Spa 104 Bromo Boost
- 3. Clear Spa 104 Metal Guard
- 4. Clear Spa 104 Crystal Brite
- 5. Clear Spa 104 No Foam

DATE OF PREPARATION

1-12-2017

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.



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Bright Tablets

Revision date 8-22-2016

Section 1 Identification

Product ID: Bromo Bright Tablets

Chemical name 1,3-Dibromo-5,5-dimethylhydantoin

Synonym(s)BCDMH, HalobromChemical formulaC 5 H 6 BrCIN 2 O 2Chemical familyHalogenated hydantoin

Molecular weight 241.5

Product Use: 1" Tabs for use in Bromine Feeders for Spas & Hot Tubs

Supplier: Oreq Corporation

42306 Remington Ave. Temecula CA 92590 (951) 296-5076

Emergency Telephone: CHEMTREC: 1-800-424-9300

Section 2 Hazards identification

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

GHS classification Acute Tox. 4, H302 Harmful if swallowed

Skin Corr. 1B, H314 Causes severe skin burns and eye damage

Skin Sens. 1, H317 May cause an allergic skin reaction Aquatic Acute 1, H400 - Very toxic to aquatic life

Labels and other form of warning Symbol(s)







Signal Word

DANGER

Hazard statements H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H400 - Very toxic to aquatic life

EUH031 - Contact with acids liberates toxic gas

Precautionary statements P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

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

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/ shower

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.



Product name Clear Spa 104 Spa Solutions Bromo Bright Tablets

Revision date 8-22-2016

Section 2 Hazards identification (Continued)

P310 - Immediately call a POISON CENTER or doctor/physician

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 + P364 - Take off all contaminated clothing and wash it before reuse

P391 - Collect spillage

P264 - Wash hands thoroughly after handling

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

P272 - Contaminated work clothing should not be allowed out of the workplace

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

P330 - Rinse mouth P405 - Store locked up

Ingestion

P501 - Dispose of contents/container in accordance with national and international regulations.

NFPA Ratings (Scale 0-4) Health = 3, Fire = 0, Reactivity = 1. Special Hazard Warning: OXIDIZER. **HMIS** Ratings (Scale 0-4) Health = 3, Fire = 0, Reactivity = 1.

Section 3 Composition / Information on ingredients

Components	CAS No.	Weight %
1,3-Dibromo-5,5-dimethylhydantoin	16079-88-2	96-99.5

Section 4 First - aid measures

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.

Skin contact Take off contaminated clothing.

Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison

control center or doctor for treatment advice.

Inhalation Move person to fresh air. If person is not breathing, call 911 or an ambulance,

then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Call poison control center or doctor immediately for treatment advice.

The property of the control control of the control

Have person sip a glass of water if able to swallow.

Do not induce vomiting unless told to do so by the poison control center or doctor.

Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, acute or delayed

- Eye Contact Corrosive

May cause temporary or permanent eye damage.

- **Skin contact** Exposure to wet skin may cause severe irritation

May cause skin sensitization

- **Inhalation** Irritant to upper respiratory tract.

Shortness of breath, headache and nausea.

Note to physician Corrosive

No specific antidote.

In case of ingestion DO NOT induce vomiting.

Treat symptomatically and supportively.

Probable mucosal damage may contraindicate the use of gastric lavage.



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Bright Tablets

Revision date 8-22-2016

Section 5 Fire - fighting measures

Suitable extinguishing media

Dry powder or carbon dioxide. Water may be ineffective. In case of exothermic

decomposition and appearance of smoke, water should be used to suppress it.

Extinguishing media not to be

Used.

Do not use dry chemical extinguisher containing ammonia compounds.

Unusual fire and explosion

Hazards

Forms explosive mixtures with combustible, organic or other easily oxidizable materials. When heated to decomposition, may release poisonous and corrosive fumes. Dust may form a weak explosive mixture with air (class St1), but is not

sensitive to ignition from electrostatic discharges.

Fire fighting procedure Cool containers with water spray. In closed stores, provide fire-fighters with

self-contained breathing apparatus in positive pressure mode.

Section 6 Accidental release measures

Personal precautions Evacuate area. Use respirator with combined filter (inorganic gas and dust),

gloves, chemical safety goggles and body covering clothes. If material is decomposing, use self-contained breathing apparatus and a fully encapsulated

suit.

Methods for cleaning up

Sweep up, place in a suitable container and hold for waste disposal. Avoid raising

dust. Ventilate area and wash spill site after material pickup is complete.

Environmental precautions Prevent entry into sewers and watercourses

Section 7 Handling and storage

Handling Keep containers tightly closed.

Storage Keep away from all sources of ignition. Recommended storage temperature below

30°C. For transportation purposes it is possible to store at temperatures up to 50°C. Store in a dry, well-ventilated area. Store away from incompatible materials

(see "materials to avoid").

Section 8 Exposure controls / personal protection

Components	ACGIH-TVL Data	OSHA (PEL) Data
1,3-Dibromo-5,5-dimethylhydantoin 16079-88-2	Not Determined	Not Determined

Manufacturer's TLV-TWA Recommendation 0.1 mg/m³

Ventilation requirementsUse local exhaust as necessary, especially under dusty conditions. Ventilation

must be sufficient to maintain atmospheric concentration below recommended

exposure limit.



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Bright Tablets

Revision date 8-22-2016

Section 8 Exposure controls / personal protection (Continued)

Personal protective equipment:

- Respiratory protection Respirator with combined filter (inorganic gas and dust).

- Hand protection Neoprene gloves

- Eye protection Chemical safety goggles

- Skin and body protection Body covering clothes and boots

Hygiene measuresDo not eat, smoke or drink where material is handled, processed or stored. Wash

hands thoroughly after handling and before eating or smoking. Safety shower and

eye bath should be provided.

Section 9 Physical and chemical properties

Appearance White to off-white tablet with faint halogenous odour

Melting point/range Not applicable (decomposes)

Boiling point/range Not applicable Flash point Not applicable

Evaporation rate (ether=1) Not applicable under standard conditions

Flammable/Explosion limits Not available

Vapor pressure 9.35x10(-3) Pa (25°C)

Vapor density Not applicable under standard conditions

Solubility:

- Solubility in water 0.22 g/100ml at 25°C

- Solubility in other solvents Benzene: 2.5 g/100g at 25°C

Partition coefficient

(n-octanol/water) Kow = <1 (pH 5-9)
Auto-ignition temperature Not available
Decomposition temperature >160°C
Specific gravity 1.8-2.0

Explosive properties Dust may form a weak explosive mixture with air (class St1), but is considered

insensitive to ignition from electrostatic discharges.

Oxidising properties Not sufficient for classification as oxidizer (Method A17 & UN Test O.1)

Particle size Not available

Section 10 Stability and reactivity

Reactivity Combustible materials. Oxidizing agents. Bases.

Stability Stable under normal conditions

Possibility of hazardous Contact with combustible materials may initiate decomposition of the material and

reactions emission of smoke.

Conditions to avoid Exposure to moisture. Heating above decomposition temperature.

Materials to avoid COMBUSTIBLE ORGANIC MATERIALS

Bases

Oxidizing agents

Hazardous decomposition

products CO, HBr, Cl2, NOx, HCl, CO2



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Bright Tablets

Revision date 8-22-2016

Section 11 Toxicological information

Likely Routes of Exposure Skin

Eye contact

Inhalation

Acute toxicity:

- **Rat oral LD50** 929 mg/kg

- Rat inhalation LC50 1.1 mg/l/4 hour (powder)

- Dermal irritation (rabbit) Corrosive Dermal sensitization Sensitizer.

Chronic toxicity Prolonged skin contact may cause sensitization

Mutagenicity Mutagenic by the Ames Test

Mutagenic in the mouse lymphoma L5178Y test system. Non genotoxic in an in-vivo micronucleus test in mice

Non genotoxic in an in-vivo liver unscheduled DNA synthesis (USD) assay

Carcinogenicity Not classified by IARC

Not included in NTP 12th Report on Carcinogens

Section 12 Ecological information

Aquatic toxicity:

- 96 Hour-LC50, Fish 1.2 mg/l (Eastern oyster, Acute flow through)

1.9 mg/l (Mysid shrimp, Acute flow through)

0.4 mg/l (Rainbow trout, Static) 0.46 mg/l (Bluegill sunfish, Static)

1.6 mg/l (Sheepshead minnow, Acute flow through)

- 48 hour-LC50, Daphnia magna 0.75 mg/l (Static)

Avian toxicity:

Oral LD50, Bobwhite quail
 Dietary LC50, Mallard duck
 Dietary LC50, Bobwhite quail
 5620 ppm

Persistence and degradability BCDMH and the main degradation product DMH are biodegradable and do not

persist in the environment

Bioaccumulative potential Based on low Kow values, i.e less than 1, BCDMH would not be predicted to

significantly accumulate in aquatic organisms, or sorb to organic material in soil or

sediment.

Mobility in soil There will be no exposure of BCDMH to soil. The main degradation product DMH

is mobile in soil.

Germany, water endangering

classes (WGK)

2

Section 13 Disposal considerations

Waste disposal Dispose of in approved landfill sites or an approved incinerator.

Avoid access to streams, lakes or ponds.

Observe all federal, state and local environmental regulations when disposing of

this material.

Disposal of Packaging Crush and bury empty containers.

Do NOT throw into public waste disposal site. Avoid contact with organic materials

and moisture. See conditions to avoid (Section 10)



Product name Clear Spa 104 Spa Solutions Bromo Bright Tablets

Revision date 8-22-2016

Section 14 Transport information

DOT UN number: 1479

Proper shipping name: Oxidizing Solid, n.o.s.

(1,3-Dibromo-5,5-dimethylhydantoin)

Class: 5.1 - Oxidizing substances

Label: OXIDIZER (5.1)

Packing Group:

Marking: Marine Pollutant

Section 15 Regulatory information

USA This product is registered under FIFRA

(CAS #16079-88-2)

TSCA: EPA Number P-94-34

Subject to reporting under SNUR (Significant New Use Rule) -any use, 60 CFR

11037

- Emergency overview in DANGER accordance to EPA Master Label Corrosive

Causes irreversible eye damage and skin burns

Eye contact may cause loss of vision

Harmful if inhaled

Irritating to nose and throat

Harmful if absorbed through skin or swallowed This product is toxic to fish and aquatic organisms.

Strong oxidizing agent

- SARA 313 This product does not contain a chemical listed at or above de minimis

concentrations

- SARA (311, 312) This product is a hazardous chemical under 29CFR 1910.1200, and categorized

as an immediate and delayed health, and reactivity physical hazard

- Waste Classifications Not listed under CERCLA. If this product becomes a waste, it meets the criteria of

a hazardous waste as defined under 40 CFR 261 and would have the following

EPA hazardous waste number:D001.

EU Reported in EINECS

EC No. 251-171-5

JapanENCS No. 5-6368New Zealand InventoryListed in NZIoC

China

- China inventoryPhilippinesListed in PICCS

Section 16 Other information

DATE OF PREPARATION 8-22-2016

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.



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Boost

Revision date 6-11-15

Product ID: Bromo Boost

Chemical Name: Sodium Bromide **Synonyms:** Sodium Bromide

Chemical Formula:

CAS Number:

7647-15-6

Product Use:

Pool Algaecide

Supplier: Oreq Corporation

42306 Remington Avenue Temecula, CA 92590

951-296-5076

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

GHS classification Not Classified Labels and other form of warning Not Classified

Components	CAS No.	Weight %
Sodium Bromide	7647-15-6	98-100

Eye contactHold 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.

Skin contact Take off contaminated clothing.

Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control

center or doctor for treatment advice.

Inhalation Move person to fresh air. If person is not breathing, call 911 or an ambulance,

then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a

poison control center or doctor for further treatment advice.

Ingestion Call poison control center, or doctor immediately for treatment advise.

Have person sip a glass of water if able to swallow.

Do not induce vomiting unless told to do so by the poison control center or doctor.

Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, acute or delayed

None known

Note to physician No specific antidote.

Treat symptomatically and supportively.

Probable mucosal damage may contraindicate the use of gastric lavage.



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Boost

Revision date 6-11-15

Suitable extinguishing media Material is not combustible. Use extinguishing media appropriate to surrounding fire

conditions.

Unusual fire and explosion

hazards

Will decompose from ca. 800°C releasing poisonous and corrosive fumes

of hydrogen bromide and sodium oxide.

Fire fighting procedure Cool containers with water spray. In closed stores, provide fire-fighters with

self- contained breathing apparatus in positive pressure mode

Personal precautionsUse dust respirator, rubber gloves and chemical safety goggles.

Methods for cleaning upSweep up, place in a bag and hold for waste disposal or possible re-use

Ventilate area and wash spill site after material pickup is complete.

Avoid raising dust.

Environmental precautions Prevent entry into sewers and watercourses

Handling Avoid bodily contact. Keep containers tightly closed.

Storage Keep in a well-ventilated place away from incompatible materials

(see "materials to avoid").

Exposure Limits:

LXPOSUIE LIIIIILS .		
Components	ACGIH-TLV Data	OSHA (PEL) Data
Sodium Bromide	Not determined	Not determined
7647-15-16		

Ventilation requirements Provide adequate ventilation.

Personal protective equipment:

- Hand protection Protective gloves

- Eye protection Chemical safety goggles

- **Skin and body protection** Body covering clothes and boots

Hygiene measures Do not eat, smoke or drink where material is handled, processed or stored.

Wash hands carefully before eating or smoking. Safety shower and eye bath

should be provided.

Appearance White, odorless, crystalline solid

Melting point/range755°CBoiling point/range1390°CFlash pointNone

Evaporation rate (ether=1)Not applicable under standard conditions

Flammable/Explosion limits Not flammable



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Boost

Revision date 6-11-15

Vapour pressure 1 mmHg (806°C)

Vapor density Not applicable under standard conditions

Solubility:

- Solubility in water 94.6 gr/100ml at 25°C

- Solubility in other solvents ethanol: 95%: 7 g/100g at 25°C

methanol: 14.8 g/100g at 25°C

Partition coefficient

(n-octanol/water) Not applicable since this material is almost completely soluble in water.

Auto-ignition temperatureNot applicableViscosity:Not applicable

Specific gravity 3.203

Explosive propertiesOxidizing properties
Not explosive
Not oxidizing

Reactivity Reacts explosively with bromine trifluoride .

Stability Stable under normal conditions

The powder product tends to cake under normal storage conditions.

Possibility of hazardous

reactions

Not expected to occur

Conditions to avoid Heating above decomposition temperature

Materials to avoid Strong acids. Strong oxidants. Heavy metal salts.

Hazardous Decomposition

Products Hydrogen bromide and sodium oxide Bromine fumes

Likely Routes of Exposure Skin

Eye contact Inhalation Ingestion

Acute toxicity:

- Rat oral LD50 4200 mg/kg
- Rabbit dermal LD50 >2000 mg/kg
- Rat dermal LD50 >2000 mg/kg
- Eye irritation (rabbit) Slightly irritant
- Dermal irritation (rabbit) Not irritant

Dermal sensitization Not a sensitizer

Chronic toxicity Repeated skin contact may cause dermatitis. Repeated oral intake of bromides (>9 mg/kg

body weight/day) may affect the central nervous system. Warning symptoms include mental dullness, slurred speech, weakened memory, apathy, anorexia, constipation,

drowsiness and loss of sensitivity to touch and pain.

Mutagenicity Does not induce DNA repair in cultured human epithelioid cells.

Not clastogenic in human lymphocytes metaphase analysis.

Not mutagenic by the Ames Test



Product name Clear Spa ¹⁰⁴ Spa Solutions Bromo Boost

Revision date 6-11-15

Carcinogenicity Not classified by IARC / Not included in NTP 13th Report on Carcinogens

Reproductive toxicity Sodium bromide has been shown to cause embryo-fetal toxicity and malformations

in rats at dose levels which also produce maternal toxicity. The No-Observed Effect Level (NOEL) is 100 mg/kg/day, and the Acceptable Daily Intake (ADI) for sodium bromide from food and drinking water in humans is 1 mg/kg/day. Comparable high doses of sodium chloride (table salt) similarly cause malformations, embryo-fetal

toxicity, and maternal toxicity in mice.

Teratogenicity In the oral gavage pre-natal developmental toxicity study in the Rabbit, there were no

obvious effects of maternal treatment on the survival, growth or development of the offspring at any of the dosages investigated. The No Observed Effect Level (NOEL)

for the developing conceptus was considered to be 250 mg/kg/day.

Aspiration hazard Not expected to occur

Environmental fate NaBr is an inorganic salt, which fully dissociates in aquatic environment to bromide

and sodium ions. It also undergoes degradation in soil to bromide ion (no further

degradation or biodegradation will occur).

Aquatic toxicity:

- 96 Hour-LC50, Fish >1000 mg/l (rainbow trout)

>1000 mg/l (bluegill sunfish)

- 48 Hour-EC50, Daphnia magna >1000 mg/l

Avian toxicity:

Oral LD50, Bobwhite quail
 Dietary LC50, Mallard duck
 Dietary LC50, Bobwhite quail
 >5633 ppm
 >5633 ppm

Toxicity to micro-organisms Activated sewage sludge respiration inhibition test: EC50 > 1000 mg/l (3 hours).

NOEC was 1000 mg/l (3 hours)

Persistence and degradability

Bioaccumulative potential

Mobility in soil

Not relevant for inorganic salts

Not expected to bio-accumulate BCF=0.23-1.41

Not relevant for inorganic salts

Waste disposal Observe all federal, state and local environmental regulations when disposing of this material.

Packaging disposal Dispose of in a safe manner in accordance with local/notional regulations.

DOT Not regulated

IMDG Not regulated

ICAO/IATA Not regulated



Product name Clear Spa 104 Spa Solutions Bromo Boost

Revision date 6-11-15

USA Reported in the EPA TSCA Inventory

This product is registered under FIFRA.

- Emergency overview in Sodium Bromide-SP (EPA Reg. No. 8622-78)

accordance to EPA Master Label CAUTION

Causes eye irritation

Harmful if absorbed through skin or swallowed This product is toxic to fish and aquatic organisms.

Sodium Bromide-COMP (EPA Reg. No. 8622-45)

CAUTION

Harmful if absorbed through skin or swallowed This product is toxic to fish and aquatic organisms.

- SARA 313 Not listed

Canada Listed in DSL

-WHMIS hazard class D2A very toxic material causing other toxic effects

EU Reported in EINECS

EC No. 231-599-9

Japan ENCS no. 1-113

ISHL no. 1-113

Australia Listed in AICS

New Zealand Inventory Listed in NZIoC

China inventory Listed in IECSC

Korea Listed in ECL (KE-31368)

Philippines Listed in PICCS

DATE OF PREPARATION 6-11-15

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.



Product name Clear Spa ¹⁰⁴ Spa Solutions Metal Guard

Revision date 5-16-15

Section 1 Identification

Product ID: Metal Guard

Chemical Name: (1-Hydroxyethylidene)diphosphonic acid

Synonyms: Etidronic Acid: 1-Hydroxyethylidene-1,1-diphosphonic acid: HEDP

 Chemical Formula:
 C2H8O7P2

 CAS Number:
 2809-21-4

Product Use: Surface and Equipment Protectant

Supplier: Oreq Corporation

42306 Remington Avenue Temecula, CA 92590

951-296-5076

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

Section 2 Hazards identification

EMERGENCY OVERVIEW DANGER



Hazard Statement(s)

Corrosive to metals (Category 1) Serious eye damage (Category 1)

H290: May be corrosive to metals. H303: May be harmful if swallowed. H318: Causes serious eye damage.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P273: Avoid release to the environment.

P280: Wear protective gloves/eye protection/face protection.

P234: Keep only in original container.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

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

P310: Immediately call a POISON CENTER or doctor/physician.

P406: Store in corrosive resistant stainless steel container with a resistant inner liner.

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

HMIS CLASSIFICATIONHealth Hazard2Health Hazard2Flammability0Fire0Physical Hazards0Reactivity Hazard0



Product name Clear Spa ¹⁰⁴ Spa Solutions Metal Guard

Revision date 5-16-15

Section 2 Hazards identification (Continued)

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. **Ingestion:** May be harmful if swallowed.

Section 3 Composition / Information on ingredients

COMPONENT	CAS#	PERCENT
(1-Hydroxyethylidene)diphosphonic acid	2809-21-4	7%-14%

Section 4 First - aid measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

dangerous area.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin Contact: Wash off with soap and plenty of water. Consult a physician.

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 Fire - fighting measures

Extinguishing Media

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from

the substance or mixture: Carbon oxides, Oxides of phosphorus.

Advice for Firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Section 6 Accidental release measures

Personal Precautions: Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate

ventilation. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter

drains. Discharge into the environment must be avoided.

Methods and materials for

containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable,

closed containers for disposal.



Product name Clear Spa ¹⁰⁴ Spa Solutions Metal Guard

Revision date 5-16-15

Section 7 Handling and storage

Precautions for Safe Handling: Avoid inhalation of vapor or mist. Normal measures for preventive fire protection.

Conditions for safe storage,

including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which

are opened must be carefully resealed and kept upright to prevent leakage.

Store at room temperature.

Section 8 Exposure controls / personal protection

Control Parameters

Components with workplace

control parameters: Contains no substances with occupational exposure limit values.

Exposure Controls

Appropriate Engineering Controls: Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

Personal Protective Equipment

Eye/Face Protection:

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection:

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure: Do not let product enter drains.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 Physical and chemical properties



Product name Clear Spa ¹⁰⁴ Spa Solutions Metal Guard

Revision date 5-16-15

Appearance: Colorless to pale yellow liquid.

Odor: Mild. Vinegar like.
Odor Threshold: Not Available

pH (1% solution): <2.0 **Melting Point:** 198-199°C

Boiling Point: 578.8°C at 760 mmHg

Flash Point: 303.8°C

Stability: Stable under ordinary conditions.

Evaporation Rate:Flammability (solid, gas):
Upper/Lower Flammability or Explosive Limits:
Not Available
Not Available

Vapor Pressure (mm Hg): 8.34E-16mmHg at 25°C

Density @ 25°C: 1.45 g/mL **Specific Gravity:** 1.43 – 1.46

Solubility in Water: Completely miscible with water in all proportions.

Partition Coefficient (n-octanol/water): log Pow: -3,49
Auto-ignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity: Not Available
Explosive Properties: Not Available
Oxidizing Properties: Not Available
Molecular Weight: 201.9987

Section 10 Stability and reactivity

Reactivity: Not Available.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Corrosive in contact with metals.

Conditions to Avoid: Not Available

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions. –

Carbon oxides, Oxides of phosphorus.

Section 11 Toxicological information

Acute Toxicity: LD50 Oral – rat – 2610 mg/kg

LD50 Dermal – rabbit – 8630 mg/kg

Inhalation: Not Available

Skin Corrosion/Irritation: Skin – rabbit – no skin irritation – Draize Test

Serious Eye Damage/Eye Irritation: Eyes – rabbit – Severe eye irritation – OECD Test Guideline 405

Respiratory or Skin Sensitization: Not Available Germ Cell Mutagenicity: Not Available

Section 11 Toxicological information (Continued)

Carcinogenicity



Product name Clear Spa ¹⁰⁴ Spa Solutions Metal Guard

Revision date 5-16-15

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified

as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as

a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified

as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity:

Specific target organ toxicity - single exposure:

Specific target organ toxicity - repeated exposure:

Aspiration Hazard:

Not Available
Not Available

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 Ecological information

Toxicity

-Toxicity to fish: mortality – Salmo gairdneri – 217 mg/l – 96h

-Toxicity to daphnia and other aquatic invertebrates: Immobilization EC50 – Daphnia magna (water flea) – 572 mg/l – 48h

-Toxicity to Algae: Growth inhibition - SELENASTRUM - 42 mg/l - 14 d

Persistence and Degradability: Not Available Bioaccumulative Potential: Not Available

Mobility in Soil: Not Available

Results of PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other Adverse Effects: And environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

Section 13 Disposal considerations

Waste Treatment Methods

Product: Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and



Product name Clear Spa ¹⁰⁴ Spa Solutions Metal Guard

Revision date 5-16-15

non-recyclable solutions to a licensed disposal company.

Contaminated Packaging: Dispose of as unused product.

Section 14 Transport information

DOT: UN Number: ORM-D

UN Proper Shipping Name: ORM-D Transport Hazard Class: ORM-D Packing Group: ORM-D

Consumer commodity (ORM-D) means a material that is packaged and distributed in a form intended or suitable for sale through retail sales agencies or instrumentalities for consumption by individuals for purposes of personal care or household use. Valid until December 31, 2020.



TDG: UN Number: 3265

UN Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (1 Hydroxyethylidene)diphosphonic acid

Transport Hazard Class: 8
Packing Group: III
Marine Pollutant: No

MEX: UN Number: 3265

UN Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(1 Hydroxyethylidene)diphosphonic acid

Transport Hazard Class: 8
Packing Group: III
Marine Pollutant: No

IMDG: UN Number: 3265

UN Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(1 Hydroxyethylidene)diphosphonic acid

Transport Hazard Class: 8
Packing Group: III
EMS-No: F-A, S-B
Marine Pollutant: No

Section 14 Transport information (Continued)

IATA: UN Number: 3265

UN Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.

(1 Hydroxyethylidene)diphosphonic acid

Transport Hazard Class: 8
Packing Group: | | | | |



Product name Clear Spa 104 Spa Solutions Metal Guard

Revision date 5-16-15

Section 15 Regulatory information

OSHA Hazards: Irritant

DSL Status: All components of this product are on the Canadian DSL list.

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

SARA 313 Components: 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.

SARA 311/312 Hazards: Acute Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: CAS-No. Revision Date

Etidronic acid 2809-21-4

New Jersey Right To Know Components: CAS-No. Revision Date

Etidronic acid 2809-21-4

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16 Other information

DATE OF PREPARATION 5-16-15

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.



Product name Clear Spa 104 Spa Solutions Crystal Brite

Revision date 6-11-15

Product ID: Crystal Brite

Chemical Name:

Synonyms:

Chemical Formula:

CAS Number:

Product Use:

Not Available

Not Available

Not Available

Water Clarifier

Supplier: Oreq Corporation

42306 Remington Avenue Temecula, CA 92590

951-296-5076

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

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

(29 CFR 1910.1200).

GHS Classification: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

GHS SIGNAL WORD: WARNING

HAZARD PICTOGRAM:

(!)

Hazard Statement(s)

H318: Causes serious eye damage

H320: Causes eye irritation

Precautionary Statement(s):

Prevention

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

P264 - Wash hands thoroughly after handling

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.

<u>Storage</u> Not Applicable <u>Disposal</u> Not Applicable



Product name Clear Spa ¹⁰⁴ Spa Solutions Crystal Brite

Revision date 6-11-15

Substance/mixture: Mixture

Other means of

Identification: Not available.

Product code: Clear Spa 104 Spa Solutions Crystal Brite

While some substances are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), all known hazards are clearly communicated within this document.

Description of necessary first aid measures

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check

for and remove any contact lenses. Continue to rinse for at least 10minutes. If irritation persists, get

medical attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if

breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a

fire, symptoms may be delayed. The exposed person may need to be kept under medical

surveillance for 48 hours.

Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before

reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a

position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semicomatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product seek medical assistance immediately; take individual to nearest medical

facility.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation :No known significant effects or critical hazards.Ingestion :No known significant effects or critical hazards.Skin contact :No known significant effects or critical hazards.

Eye contact : Causes eye irritation.



Clear Spa 104 Spa Solutions Crystal Brite **Product name**

Revision date 6-11-15

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data. Skin contact: No specific data No specific data. Ingestion:

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

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

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

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

None known. Unsuitable extinguishing media:

Specific hazards arising

from the chemical

In a fire or if heated, a pressure increase will occur and the container may

burst.

Hazardous thermal

decomposition products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide

nitrogen oxides

halogenated compounds

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the

incident if there is a fire. No action shall be taken involving any

personal risk or without suitable training.

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.

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. For non-emergency:

Personnel

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective

equipment.



Clear Spa 104 Spa Solutions Crystal Brite **Product name**

Revision date 6-11-15

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information

in Section 8 on suitable and unsuitable materials. See also the information in "For

nonemergency personnel".

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains **Environmental precautions:**

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 Stop leak if without risk. Move containers from spill area. Dilute with water and mop up

if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste

disposal contractor.

Large spill Stop leak if without risk. Move containers from spill area. Approach release from upwind.

> Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and

Section 13 for waste disposal.

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid

> contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

Do not reuse container.

Advice on general

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 Occupational hygiene:

smoking. Remove contaminated clothing and protective equipment before entering eating

areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any

incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.



Product name Clear Spa ¹⁰⁴ Spa Solutions Crystal Brite

Revision date 6-11-15

Control parameters

Occupational exposure limits None

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne

contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure

they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment

will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: 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.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and

safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk

assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless

the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should

be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task

being performed and the risks involved and should be approved by a specialist

before handling this product.

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: Use a properly fitted, air-purifying or air-fed respirator complying with an approved

standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and

the safe working limits of the selected respirator.

Physical state: Liquid
Color: Amber
Odor: Slight

Odor Threshold: Not available

pH 4 to 8

Vapor pressure:Not availableVapor density:Not availableRelative density:Not availableDispersibility properties:Not available



Clear Spa 104 Spa Solutions Crystal Brite **Product name**

Revision date 6-11-15

Melting point: Not available **Boiling point:** Not available

Flash point: Closed cup: >100°C (>212°F)

Evaporation rate: Not available

Flammability (solid, gas) Not available Lower and upper explosive Not available

(flammable) limits

Solubility: Easily soluble in the following materials: cold water / hot water

Partition coefficient: Not available

n-octanol/water

Auto-ignition temperature: >200°C (>392°F) **Decomposition temperature:** Not available Viscosity: Not available VOC: Not available

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:

Conditions to avoid: No specific data. Incompatible materials: No specific data.

Hazardous decomposition

Products:

Under normal conditions of storage and use, hazardous decomposition products should

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

not be produced.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Clear Spa 104 Spa Solutions Crystal Brite	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary: This product is not expected to be toxic by inhalation.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Clear Spa 104 Spa	Eyes- Mild irritant	Mammal- species unspecified	-	-	-
Solutions Crystal Brite	Skin- Mild irritant	Mammal- species unspecified	_	-	-
	Respiratory-				
	Mild irritant	Mammal- species unspecified	_	_	-

Conclusion/Summary

Skin: This product has been tested for cutaneous irritation on New Zealand White male rabbits according

to OECD guideline 404. No effects (erythema or edema) were observed after 24 hours. This

product is not irritating to skin. May cause skin irritation with susceptible persons.

Eyes: Testing conducted on rabbits showed minor transient irritation which cleared within days.

Respiratory: Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of

exposure.

Sensitization Not available

Conclusion/Summary

Skin: This product is not expected to be sensitizing. Respiratory: This product is not expected to be sensitizing.



Product name Clear Spa ¹⁰⁴ Spa Solutions Crystal Brite

Revision date 6-11-15

Mutagenicity Not available.

Conclusion/Summary: Not mutagenic in Ames test. Not mutagenic in micronucleus test on mice.

<u>Carcinogenicity</u> This product has not been tested unless noted in summary results.

Reproductive toxicityNot availableTeratogenicityNot available

Conclusion/Summary: Not teratogenicity. NOEL = 175 mg/kg

Specific target organ toxicity

Single exposure - Not available
Repeated exposure- Not available

Aspiration hazard Not available

Information on the likely Routes of entry anticipated: Dermal, Inhalation.

routes of exposure: Routes of entry not anticipated: Oral.

Potential acute health effects

Eye contact: Causes eye irritation

Inhalation:No known significant effects or critical hazards.Skin contact:No known significant effects or critical hazards.Ingestion:No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.

Skin contact: No specific data
Ingestion: No specific data.

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

Short term exposure

Potential immediate effects: Not available Potential delayed effects: Not available

Long term exposure

Potential immediate effects:Not availablePotential delayed effects:Not availablePotential chronic health effectsNot available

Conclusion/Summary: Chronic Toxicity:NOEL / Oral / rat 90-day =5000 mg/kg

Two year feeding study on rats and dogs did not reveal any adverse health effects.

Not mutagenetic in AMES Test.

Not mutgenetic in micronucleus test on mice.

Not teratogenic, NOEL = 175 mg/kg.

General:

Carcinogenicity:

No known significant effects or critical hazards



Product name Clear Spa ¹⁰⁴ Spa Solutions Crystal Brite

Revision date 6-11-15

Teratogenicity:

No known significant effects or critical hazards

Numerical measures of toxicity

Acute toxicity estimates Not available

Toxicity

Product/ingredient name	Result	Species	Exposure
Clear Spa 104 Spa Solutions	Acute EC50 >10 mg/l	Daphnia	48 hours
Crystal Brite	Acute LC50 >10 mg/l	Fish	96 hours

Disposal methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

	DOT Classification	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No	No	No
Additional information	-	-	The environmentally hazardous substance mark may appear if required by other transportation regulations.

<u>Special precautions for user:</u> 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



Product name Clear Spa ¹⁰⁴ Spa Solutions Crystal Brite

Revision date 6-11-15

Potential impurities present in trace quantities are included in the regulatory listings of this section.

U.S. Federal regulations: United States inventory (TSCA 8b): All components are listed or exempted.

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

No products were found.

CERCLA: CERCLA: Hazardous substances.: No products were found.

FDA: This product is allowed under the following FDA (21 CFR) sections: 176.170 Limitations:

1) As a pigment dispersant and/or retention aid prior to the sheet-forming operation in the manufacture of paper and paperboard, and used at a level not to exceed 10 pounds of active polymer per ton of finished paper and paperboard. 2) As a pigment dispersant in coatings at a level not to exceed 3.5 pounds of active polymer per ton of finished paper and paperboard. 3) For use only as a flocculant employed prior to the sheet forming operation in the manufacture of paper and paperboard, and used at a level not to exceed 10

mg/L (10 parts per million) of influent water

FIFRA This product is not a registered pesticide.

HMIS/NPCA Rating ... Health1Flammability0Reactivity0NFPA RatingsHealth1Flammability0Reactivity0

DATE OF PREPARATION 6-11-2015

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.



Product name Clear Spa ¹⁰⁴ Spa Solutions No Foam

Revision date 5-16-15

Section 1 Identification

Product ID: No Foam

Chemical Name: Polydimethylsiloxane
Synonyms: Silicone Emulsion
Chemical Formula: Not Available
CAS Number: 63148-18-5

Product Use: Eliminates Foam and Sudsing

Supplier: Oreq Corporation

42306 Remington Avenue Temecula, CA 92590

951-296-5076

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

Section 2 Hazards identification

EMERGENCY OVERVIEW

OSHA Regulatory Status: This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122). Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

Health: 0 Flammability: 0 Reactivity: 0 Special: 0

0 = minimal 1= slight 2=moderate 3= serious 4= severe

Route(s) of Entry

Inhalation: No inhalation hazard identified from data available. **Skin Contact:** May cause irritation and reddening; rinse skin with water.

Ingestion: No adverse effect expected.Eye Contact: May cause irritation or reddening.

Target Organs: None known

Effects of Overexposure: Contact with the eyes may cause irritation. Ingestion will cause mouth,throat and gastrointestinal irritation. Inhalation of harmful levels of vapors is unlikely due to the relatively low vapor pressure and the relatively low concentrations of ingredients.

Acute Effects of Overexposure:

Chronic:

Medical Conditions Generally Aggravated by Long-Term Exposure:

Chronic Effects:

None known

None known

Carcinogenicity

NTP: None known IARC Monographs: None known OSHA Regulations: None known ACGIH: None known



Product name Clear Spa ¹⁰⁴ Spa Solutions No Foam

Revision date 5-16-15

Section 3 Composition / Information on ingredients

Component	CAS#	Percent
Polydimethylsiloxane	63148-18-5	2%

Section 4 First - aid measures

Eye Contact: Flush eyes with large amounts of water for 15 minutes. If irritation persists, get medical attention.

Skin Contact: Wash affected area thoroughly with soap and water. Remove contaminated clothing, rings, etc.

Ingestion: Give several glasses of water to dilute. Do not induce vomiting.

Inhalation: None required.

Section 5 Fire - fighting measures

Unusual Fire Fighting Procedures: None required; non-flammable product.

Flash Point:

Flash Point Method:

Burning Rate:

Auto ignition Temperature:

None detected.

Pensky Martens

Does not burn.

Not available.

Flammable Limits in Air (% by volume): Not applicable.

LEL: Not applicable. **UEL:** Not applicable.

Flammability Classification: Not flammable.

Unusual Fire or Explosion Hazards: Closed containers may rupture or explode due to steam pressure

build-up when exposed to extreme heat. Water may be used to cool closed containers.

Unusual Fire Fighting Procedures: None required.

Section 6 Accidental release measures

Spill/Leak Procedures: Recover usable material by convenient method; residual may be removed by wipe or wet mop.

Small Spills: Small spills should be absorbed with a suitable inert material (sand, earth, clay, etc.). Remove the

absorbed material and place in an appropriate chemical waste container for disposal.

Large Spills: For large spills, dike and pump into suitable containers. Clean up residual water.

Containment: For large spills, dike far ahead of liquid spill for later disposal.

Regulatory Requirements: Follow applicable Federal, State and Local regulations.

Section 7 Handling and storage

Handling Precautions: Wear impermeable gloves and other protective clothing to avoid prolonged or repeated

skin contact. When handling, wear eye protection.

Storage Requirements: Keep containers tightly closed when not in use.



Clear Spa 104 Spa Solutions No Foam **Product name**

Revision date 5-16-15

Section 8 Exposure controls / personal protection

Control Parameters: No Occupational Exposure Limits (OELs) have been established for this product or its

chemical components.

Engineering Controls

Ventilation: Provide general or local exhaust ventilation systems.

Administrative Controls

Respiratory Protection: Respirator not needed.

Protective Clothing/

Where skin contact may occur, chemical-impervious gloves should be worn. Use chemical googles or full face shield when the danger of splashing exists. Rubber apron or similar **Equipment:**

protective clothing to prevent contact with skin or clothes.

Work and Hygienic Practices: Wash or rinse hands before touching eyes or contact lenses, and before eating.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities

available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove

this material from your shoes and clean personal protective equipment.

Comments: Avoid contact with skin, eyes and clothing. Do not take internally. Clean up spills

> immediately. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or

applying cosmetics.

Section 9 Physical and chemical properties

Appearance and odor: Thick white liquid with very little odor.

Boiling Point (760 mm Hg): 212°F (at 760 mm Hg)

Freezing Point: 32°F Specific Gravity (water =1): 0.99 **Percent Organic Volatiles by Volume:** 0

Evaporation Rate (butyl acetate =1): <1 Solubility in Water (% by wt): Miscible

Vapor Pressure (at 20°C): Not Determined

pH: 7.0 - 8.0

Section 10 Stability and reactivity

Stability: Stable Polymerization: Will not occur.

Chemical Incompatibilities: None.

Conditions to Avoid: Heat, sparks, open flame and other ignition sources.

Hazardous decomposition products: Thermal decomposition may produce carbon monoxide, carbon dioxide and

oxides of silicon.



Product name Clear Spa ¹⁰⁴ Spa Solutions No Foam

Revision date 5-16-15

Section 11 Toxicological information

Eye Effects: May cause irritation and reddening. Immediately rinse eyes with large quantities of water; continue

10-15% minutes or until the material has been removed; be sure to remove contact lenses, if present and to lift upper and lower lids during rinsing. Get medical attention if irritation persists.

Skin Effects: May cause irritation; rinse skin with water, rinse shoes and launder clothing before use. Reversible

reddening may occur in some dermal-sensitive users, thoroughly rinse area and get medical

attention.

Acute Inhalation

Effects:

Exposures to concentrate-mist may cause mild irritation of nasal passages or throat; remove to

fresh air. Get medical attention if irritation persists.

Acute Oral Effects: May be irritating to mouth, throat and stomach. May cause gastric tract disorder and/or damage in

large quantities. Give several glasses of water to dilute; do not induce vomiting. If stomach upset

occurs, consult physician.

Chronic Effects: None known

Carcinogenicity: Neither product nor its ingredients are listed by IARC, NTD or OSHA

Mutagenicity: Not mutagenic Teratogenicity: Not Teratogenic

Section 12 Ecological information

Ecotoxicity: Not determined

Environmental Fate: Decomposes to carbon, oxygen, nitrogen and water.

Environmental Degradation: Biodegradable **Soil Absorption/Mobility:** Not determined

Section 13 Disposal considerations

Waste disposal method: Sanitary landfill or incinerate in approved facilities in accordance with local, state

and federal regulations.

Disposal Regulatory Requirements: Shipments of waste material may be classified as hazardous and subject to

manifesting requirements through applicable regulatory agency.

Container Cleaning and Disposal: Containers should be cleaned of residual product before disposal, and disposed

of in accordance with all applicable laws and regulations.

Section 14 Transport information

DOT: Not Dangerous Goods

TDG: Not Dangerous Goods

MEX: Not Dangerous Goods

IMDG: Not Dangerous Goods

IATA: Not Dangerous Goods



Product name Clear Spa ¹⁰⁴ Spa Solutions No Foam

Revision date 5-16-15

Section 15 Regulatory information

EPA Regulations

RCRA Hazardous Waste Number and RCRA Hazardous Waste Classification: Not applicable.

CERCLA Hazardous Substance and CERCLA Reportable Quantity: Not applicable.

SARA Toxic Chemical and SARA EHS:

Contains no components at a level that could require reporting under "SARA" Section 313.

OSHA Regulations:

Must comply with OSHA standard 29 CFR 1910.1200 (employee right to know).

Section 16 Other information

DATE OF PREPARATION 5-16-15

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.