

**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<sup>104</sup> 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, Halobrom  
**Chemical formula** C 5 H 6 BrClN 2 O 2  
**Chemical family** Halogenated 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<sup>104</sup> 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  
 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

| <u>Components</u>                 | <u>CAS No.</u> | <u>Weight %</u> |
|-----------------------------------|----------------|-----------------|
| 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.

**Ingestion** Call poison control center, or doctor immediately for treatment advice. 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<sup>104</sup> 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

| <u>Components</u>                               | <u>ACGIH-TVL Data</u> | <u>OSHA (PEL) Data</u> |
|---|-----------------------|------------------------|
| 1,3-Dibromo-5,5-dimethylhydantoin<br>16079-88-2 | Not Determined        | Not Determined         |

**Manufacturer's TLV-TWA Recommendation** 0.1 mg/m<sup>3</sup>

**Ventilation requirements** Use local exhaust as necessary, especially under dusty conditions. Ventilation must be sufficient to maintain atmospheric concentration below recommended exposure limit.

**Product name** Clear Spa<sup>104</sup> 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 measures** Do 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

|  |   |
|--|---|
| <b>Appearance</b>                              | White to off-white tablet with faint halogenous odour   |
| <b>Melting point/range</b>                     | Not applicable (decomposes)   |
| <b>Boiling point/range</b>                     | Not applicable  |
| <b>Flash point</b>                             | Not applicable  |
| <b>Evaporation rate (ether=1)</b>              | Not applicable under standard conditions  |
| <b>Flammable/Explosion limits</b>              | Not available   |
| <b>Vapor pressure</b>                          | 9.35x10 <sup>(-3)</sup> Pa (25°C)   |
| <b>Vapor density</b>                           | Not applicable under standard conditions  |
| <b>Solubility:</b>                             |   |
| - Solubility in water                          | 0.22 g/100ml at 25°C  |
| - Solubility in other solvents                 | Benzene: 2.5 g/100g at 25°C   |
| <b>Partition coefficient (n-octanol/water)</b> | Kow = <1 (pH 5-9)   |
| <b>Auto-ignition temperature</b>               | Not available   |
| <b>Decomposition temperature</b>               | >160°C  |
| <b>Specific gravity</b>                        | 1.8-2.0   |
| <b>Explosive properties</b>                    | Dust may form a weak explosive mixture with air (class St1), but is considered insensitive to ignition from electrostatic discharges. |
| <b>Oxidising properties</b>                    | Not sufficient for classification as oxidizer (Method A17 & UN Test O.1)  |
| <b>Particle size</b>                           | Not available   |

### Section 10 Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | Combustible materials. Oxidizing agents. Bases.  |
| <b>Stability</b>                          | Stable under normal conditions   |
| <b>Possibility of hazardous reactions</b> | Contact with combustible materials may initiate decomposition of the material and emission of smoke. |
| <b>Conditions to avoid</b>                | Exposure to moisture. Heating above decomposition temperature.                                       |
| <b>Materials to avoid</b>                 | COMBUSTIBLE ORGANIC MATERIALS<br>Bases<br>Oxidizing agents   |
| <b>Hazardous decomposition products</b>   | CO, HBr, Cl <sub>2</sub> , NO <sub>x</sub> , HCl, CO <sub>2</sub>                                    |

**Product name** Clear Spa<sup>104</sup> Spa Solutions Bromo Bright Tablets

**Revision date** 8-22-2016

### Section 11 Toxicological information

|                                  |   |
|----------------------------------|---|
| <b>Likely Routes of Exposure</b> | Skin<br>Eye contact<br>Inhalation   |
| <b>Acute toxicity:</b>           |   |
| - Rat oral LD50                  | 929 mg/kg   |
| - Rat inhalation LC50            | 1.1 mg/l/4 hour (powder)  |
| - Dermal irritation (rabbit)     | Corrosive   |
| <b>Dermal sensitization</b>      | Sensitizer.   |
| <b>Chronic toxicity</b>          | Prolonged skin contact may cause sensitization  |
| <b>Mutagenicity</b>              | Mutagenic by the Ames Test<br>Mutagenic in the mouse lymphoma L5178Y test system.<br>Non genotoxic in an in-vivo micronucleus test in mice<br>Non genotoxic in an in-vivo liver unscheduled DNA synthesis (USD) assay |
| <b>Carcinogenicity</b>           | Not classified by IARC<br>Not included in NTP 12th Report on Carcinogens  |

### Section 12 Ecological information

|                                |  |
|--------------------------------|--|
| <b>Aquatic toxicity :</b>      |  |
| - 96 Hour-LC50, Fish           | 1.2 mg/l (Eastern oyster, Acute flow through)<br>1.9 mg/l (Mysid shrimp, Acute flow through)<br>0.4 mg/l (Rainbow trout, Static)<br>0.46 mg/l (Bluegill sunfish, Static)<br>1.6 mg/l (Sheepshead minnow, Acute flow through) |
| - 48 hour-LC50, Daphnia magna  | 0.75 mg/l (Static)   |
| <b>Avian toxicity:</b>         |  |
| - Oral LD50, Bobwhite quail    | 1839 mg/kg   |
| - Dietary LC50, Mallard duck   | >5620 ppm  |
| - Dietary LC50, Bobwhite quail | >5620 ppm  |

|   |   |
|---|---|
| <b>Persistence and degradability</b>            | BCDMH and the main degradation product DMH are biodegradable and do not persist in the environment  |
| <b>Bioaccumulative potential</b>                | 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. |
| <b>Mobility in soil</b>                         | There will be no exposure of BCDMH to soil. The main degradation product DMH is mobile in soil.   |
| <b>Germany, water endangering classes (WGK)</b> | 2   |

### Section 13 Disposal considerations

|                              |  |
|------------------------------|--|
| <b>Waste disposal</b>        | Dispose of in approved landfill sites or an approved incinerator.<br>Avoid access to streams, lakes or ponds.<br>Observe all federal, state and local environmental regulations when disposing of this material. |
| <b>Disposal of Packaging</b> | Crush and bury empty containers.<br>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<sup>104</sup> Spa Solutions Bromo Bright Tablets  
**Revision date** 8-22-2016

**Section 14 Transport information**

|            |                       |  |
|------------|-----------------------|--|
| <b>DOT</b> | UN number:            | 1479   |
|            | Proper shipping name: | Oxidizing Solid, n.o.s.<br>(1,3-Dibromo-5,5-dimethylhydantoin) |
|            | Class:                | 5.1 - Oxidizing substances                                     |
|            | Label:                | OXIDIZER (5.1)   |
|            | Packing Group:        | II   |
|            | 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 accordance to EPA Master Label**

**DANGER**  
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.

|                              |                    |
|------------------------------|--------------------|
| <b>EU</b>                    | Reported in EINECS |
| <b>EC No.</b>                | 251-171-5          |
| <b>Japan</b>                 | ENCS No. 5-6368    |
| <b>New Zealand Inventory</b> | Listed in NZIoC    |
| <b>China</b>                 |                    |
| <b>- China inventory</b>     | Listed in IECSC    |
| <b>Philippines</b>           | Listed 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.

## **SAFETY DATA SHEET**

**Product name** Clear Spa<sup>104</sup> Spa Solutions Bromo Boost  
**Revision date** 6-11-15

**Product ID:** Bromo Boost  
**Chemical Name:** Sodium Bromide  
**Synonyms:** Sodium Bromide  
**Chemical Formula:** NaBr  
**CAS Number:** 7647-15-6  
**Product Use:** Pool Algacide  
**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

| <b>Components</b> | <b>CAS No.</b> | <b>Weight %</b> |
|-------------------|----------------|-----------------|
| Sodium Bromide    | 7647-15-6      | 98-100          |

**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.

**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**

**Note to physician** None known  
No specific antidote.  
Treat symptomatically and supportively.  
Probable mucosal damage may contraindicate the use of gastric lavage.



**Product name**                                      **Clear Spa<sup>104</sup> 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 precautions**                              Use dust respirator, rubber gloves and chemical safety goggles.

**Methods for cleaning up**                      Sweep 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 :**

| Components                   | ACGIH-TLV Data | OSHA (PEL) Data |
|------------------------------|----------------|-----------------|
| Sodium Bromide<br>7647-15-16 | Not determined | Not determined  |

**Ventilation requirements**                      Provide adequate ventilation.

**Personal protective equipment:**

- **Respiratory protection**                      In case of significant or accidental dust emissions, dust mask should be worn
- **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/range**                                      755°C  
**Boiling point/range**                                      1390°C  
**Flash point**    None  
**Evaporation rate (ether=1)**                              Not applicable under standard conditions  
**Flammable/Explosion limits**                              Not flammable

|  |  |
|--|--|
| <b>Product name</b>                            | <b>Clear Spa<sup>104</sup> Spa Solutions Bromo Boost</b>   |
| <b>Revision date</b>                           | <b>6-11-15</b>   |
| <b>Vapour pressure</b>                         | 1 mmHg (806°C)   |
| <b>Vapor density</b>                           | Not applicable under standard conditions   |
| <b>Solubility:</b>                             |  |
| - Solubility in water                          | 94.6 gr/100ml at 25°C  |
| - Solubility in other solvents                 | ethanol: 95%: 7 g/100g at 25°C<br>methanol: 14.8 g/100g at 25°C  |
| <b>Partition coefficient (n-octanol/water)</b> | Not applicable since this material is almost completely soluble in water.  |
| <b>Auto-ignition temperature</b>               | Not applicable   |
| <b>Viscosity:</b>                              | Not applicable   |
| <b>Specific gravity</b>                        | 3.203  |
| <b>Explosive properties</b>                    | Not explosive  |
| <b>Oxidizing properties</b>                    | Not oxidizing  |
| <b>Reactivity</b>                              | Reacts explosively with bromine trifluoride .  |
| <b>Stability</b>                               | Stable under normal conditions<br>The powder product tends to cake under normal storage conditions.  |
| <b>Possibility of hazardous reactions</b>      | Not expected to occur  |
| <b>Conditions to avoid</b>                     | Heating above decomposition temperature  |
| <b>Materials to avoid</b>                      | Strong acids. Strong oxidants. Heavy metal salts.  |
| <b>Hazardous Decomposition Products</b>        | Hydrogen bromide and sodium oxide Bromine fumes  |
| <b>Likely Routes of Exposure</b>               | Skin<br>Eye contact<br>Inhalation<br>Ingestion   |
| <b>Acute toxicity:</b>                         |  |
| - 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   |
| <b>Dermal sensitization</b>                    | Not a sensitizer   |
| <b>Chronic toxicity</b>                        | 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. |
| <b>Mutagenicity</b>                            | Does not induce DNA repair in cultured human epithelioid cells.<br>Not clastogenic in human lymphocytes metaphase analysis.<br>Not mutagenic by the Ames Test  |

|                                      |  |
|--------------------------------------|--|
| <b>Product name</b>                  | <b>Clear Spa<sup>104</sup> Spa Solutions Bromo Boost</b>   |
| <b>Revision date</b>                 | <b>6-11-15</b>   |
| <b>Carcinogenicity</b>               | Not classified by IARC / Not included in NTP 13th Report on Carcinogens  |
| <b>Reproductive toxicity</b>         | 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. |
| <b>Teratogenicity</b>                | 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.  |
| <b>Aspiration hazard</b>             | Not expected to occur  |
| <b>Environmental fate</b>            | 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).  |
| <b>Aquatic toxicity :</b>            |  |
| - 96 Hour-LC50, Fish                 | >1000 mg/l (rainbow trout)<br>>1000 mg/l (bluegill sunfish)  |
| - 48 Hour-EC50, Daphnia magna        | >1000 mg/l   |
| <b>Avian toxicity:</b>               |  |
| - Oral LD50, Bobwhite quail          | >2250 mg/kg  |
| - Dietary LC50, Mallard duck         | >5633 ppm  |
| - Dietary LC50, Bobwhite quail       | >5633 ppm  |
| <b>Toxicity to micro-organisms</b>   | Activated sewage sludge respiration inhibition test: EC50 > 1000 mg/l (3 hours).<br>NOEC was 1000 mg/l (3 hours)   |
| <b>Persistence and degradability</b> | Not relevant for inorganic salts   |
| <b>Bioaccumulative potential</b>     | Not expected to bio-accumulate BCF=0.23-1.41   |
| <b>Mobility in soil</b>              | Not relevant for inorganic salts   |
| <b>Waste disposal</b>                | Observe all federal, state and local environmental regulations when disposing of this material.  |
| <b>Packaging disposal</b>            | Dispose of in a safe manner in accordance with local/notional regulations.   |
| <b>DOT</b>                           | Not regulated  |
| <b>IMDG</b>                          | Not regulated  |
| <b>ICAO/IATA</b>                     | Not regulated  |

**Product name** Clear Spa<sup>104</sup> 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  
accordance to EPA Master Label**

Sodium Bromide-SP (EPA Reg. No. 8622-78)  
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<sup>104</sup> 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:** C<sub>2</sub>H<sub>8</sub>O<sub>7</sub>P<sub>2</sub>**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 CLASSIFICATION**Health Hazard 2  
Flammability 0  
Physical Hazards 0**NFPA RATING**Health Hazard 2  
Fire 0  
Reactivity Hazard 0

**Product name** Clear Spa<sup>104</sup> 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<sup>104</sup> 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<sup>104</sup> 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:** Not Available  
**Flammability (solid, gas):** Not Available  
**Upper/Lower Flammability or Explosive Limits:** 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<sup>104</sup> 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.

|  |               |
|--|---------------|
| <b>Reproductive Toxicity:</b>                              | Not Available |
| <b>Specific target organ toxicity - single exposure:</b>   | Not Available |
| <b>Specific target organ toxicity - repeated exposure:</b> | Not Available |
| <b>Aspiration Hazard:</b>                                  | Not Available |

**Potential Health Effects**

|                    |   |
|--------------------|---|
| <b>Inhalation:</b> | May be harmful if inhaled. May cause respiratory tract irritation.  |
| <b>Ingestion:</b>  | May be harmful if swallowed.  |
| <b>Skin:</b>       | May be harmful if absorbed through skin. May cause skin irritation. |
| <b>Eyes:</b>       | 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<sup>104</sup> 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:** III

**Product name** Clear Spa<sup>104</sup> 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.

|   |           |               |
|---|-----------|---------------|
| <b>Pennsylvania Right To Know Components:</b> | CAS-No.   | Revision Date |
| Etidronic acid                                | 2809-21-4 |               |

|   |           |               |
|---|-----------|---------------|
| <b>New Jersey Right To Know Components:</b> | 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<sup>104</sup> Spa Solutions Crystal Brite

**Revision date** 6-11-15

**Product ID:** Crystal Brite

**Chemical Name:** Not Available  
**Synonyms:** Not Available  
**Chemical Formula:** Not Available  
**CAS Number:** Not Available  
**Product Use:** 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.

**Storage** Not Applicable

**Disposal** Not Applicable

**Product name** Clear Spa<sup>104</sup> 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 10 minutes. 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 semi-comatose, 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.

**Product name** Clear Spa<sup>104</sup> Spa Solutions Crystal Brite

**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

**Ingestion:** No specific data.

**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.

**Unsuitable extinguishing media :** None known.

**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**

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

**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.

**Product name** Clear Spa<sup>104</sup> Spa Solutions Crystal Brite

**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".

**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** 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 non-combustible, 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 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. 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<sup>104</sup> 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.

|                        |               |                                   |               |
|------------------------|---------------|-----------------------------------|---------------|
| <b>Physical state:</b> | Liquid        | <b>Vapor pressure:</b>            | Not available |
| <b>Color:</b>          | Amber         | <b>Vapor density:</b>             | Not available |
| <b>Odor:</b>           | Slight        | <b>Relative density:</b>          | Not available |
| <b>Odor Threshold:</b> | Not available | <b>Dispersibility properties:</b> | Not available |
| <b>pH</b>              | 4 to 8        |                                   |               |





**Product name** Clear Spa<sup>104</sup> 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.

**Carcinogenicity** This product has not been tested unless noted in summary results.

**Reproductive toxicity** Not available

**Teratogenicity** Not 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 exposure:** Routes of entry anticipated: Dermal, Inhalation.  
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 available

**Potential delayed effects:** Not available

**Potential chronic health effects** Not 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 mutagenic in AMES Test.  
Not mutagenic in micronucleus test on mice.  
Not teratogenic, NOEL = 175 mg/kg.

**General:** No known significant effects or critical hazards

**Carcinogenicity:** No known significant effects or critical hazards

**Mutagenicity:** No known significant effects or critical hazards



## SAFETY DATA SHEET

**Product name** Clear Spa<sup>104</sup> Spa Solutions Crystal Brite

**Revision date** 6-11-15

**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

**Numerical measures of toxicity**

**Acute toxicity estimates** Not available

**Toxicity**

| Product/ingredient name                      | Result              | Species | Exposure |
|--|---------------------|---------|----------|
| Clear Spa 104 Spa Solutions<br>Crystal Brite | Acute EC50 >10 mg/l | Daphnia | 48 hours |
|  | 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   |
|-----------------------------------|--------------------|---------------|--|
| <b>UN number</b>                  | Not regulated      | Not regulated | Not regulated  |
| <b>UN proper shipping name</b>    | -                  | -             | -  |
| <b>Transport hazard class(es)</b> | -                  | -             | -  |
| <b>Packing group</b>              | -                  | -             | -  |
| <b>Environmental hazards</b>      | No                 | No            | No   |
| <b>Additional information</b>     | -                  | -             | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**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



# SAFETY DATA SHEET

**Product name** Clear Spa<sup>104</sup> 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 ...** Health 1 Flammability 0 Reactivity 0

**NFPA Ratings .....**Health 1 Flammability 0 Reactivity 0

**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<sup>104</sup> 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:** None known.  
**Chronic:** None known.  
**Medical Conditions Generally Aggravated by Long-Term Exposure:** None expected.  
**Chronic Effects:** None known**Carcinogenicity****NTP:** None known  
**IARC Monographs:** None known  
**OSHA Regulations:** None known  
**ACGIH:** None known

**Product name** Clear Spa<sup>104</sup> 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:** None detected.**Flash Point Method:** Pensky Martens**Burning Rate:** Does not burn.**Auto ignition Temperature:** 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.

**Product name** Clear Spa<sup>104</sup> Spa Solutions No Foam

**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/  
Equipment:**

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

|   |   |
|---|---|
| <b>Appearance and odor:</b>                 | Thick white liquid with very little odor. |
| <b>Boiling Point (760 mm Hg):</b>           | 212°F (at 760 mm Hg)                      |
| <b>Freezing Point:</b>                      | 32°F                                      |
| <b>Specific Gravity (water =1):</b>         | 0.99                                      |
| <b>Percent Organic Volatiles by Volume:</b> | 0   |
| <b>Evaporation Rate (butyl acetate =1):</b> | <1  |
| <b>Solubility in Water (% by wt):</b>       | Miscible                                  |
| <b>Vapor Pressure (at 20°C):</b>            | Not Determined                            |
| <b>pH:</b>                                  | 7.0 – 8.0                                 |

### Section 10 Stability and reactivity

|                                    |  |
|------------------------------------|--|
| <b>Stability:</b>                  | Stable   |
| <b>Polymerization:</b>             | Will not occur.                                      |
| <b>Chemical Incompatibilities:</b> | None.  |
| <b>Conditions to Avoid:</b>        | 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<sup>104</sup> 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<sup>104</sup> 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.