1. PRODUCT & COMPANY IDENTIFICATION

1.1 Product Name: BLUEGREEN® LAKE GUARD™ DEW

1.2 Chemical Name: Aluminum Sulphate Mixture

1.3 Synonyms: NA

1.4 Trade Names: BlueGreen® Lake Guard™ Dew

1.5 Product Use: Purification/Coagulation

1.6 Distributor’s Name: BlueGreen Water Technologies Ltd.

1.7 Distributor’s Address: 16 HaMiktsoot Blvd, Modi’in-Maccabim-Re’ut, Israel 7178096

1.8 Emergency Phone: CHEMTEL +1 (800) 255-3924

1.9 Business Phone / Fax / Email: +972 (0) 8-645-9666, info@bgtechs.com, www.bgtechs.com

2. HAZARDS IDENTIFICATION


2.2 Label Elements: Signal Word: Danger

Hazard Statements (H): H290 – May be corrosive to metals. H318 – Causes serious eye damage.


2.3 Other Warnings: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the manufacturer, and show them this SDS. KEEP OUT OF REACH OF CHILDREN.

3. COMPOSITION & INGREDIENT INFORMATION

<table>
<thead>
<tr>
<th>CHEMICAL NAME(S)</th>
<th>CAS No.</th>
<th>RTECS No.</th>
<th>EINECS No.</th>
<th>%</th>
<th>TLV ppm</th>
<th>STEL ppm</th>
<th>ES-TWA ppm</th>
<th>ES-STEL ppm</th>
<th>ES-PEAK ppm</th>
<th>PEL ppm</th>
<th>STEL ppm</th>
<th>IDLH ppm</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALUMINUM SULPHATE</td>
<td>10043-01-3</td>
<td>BD1700000</td>
<td>233-135-0</td>
<td>96</td>
<td>2 (2) NA NA NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal Corr. 1, Eye Dam. 1; H290, H316;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPRIETARY INGREDIENTS</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>4</td>
<td>NA</td>
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<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 First Aid:

Ingestion: If ingested, do not induce vomiting. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.

Eyes: Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes lifting upper and lower lids, occasionally.

Skin: Wash thoroughly with soap and water. In case of contact, immediately flush skin with plenty of water for at least 15 minutes.

Inhalation: Remove victim to fresh air at once. If breathing difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention.

4.2 Effects of Exposure:

Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea.

Eyes: Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation, and watering.

Skin: May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.

Inhalation: Persons accidentally exposed to dust, particularly during loading and unloading, may experience some effects including cough, wheezing and upper respiratory tract irritation.
4. FIRST AID MEASURES – cont’d

4.3 Symptoms of Overexposure:

**Ingestion:** Nausea, intestinal discomfort, vomiting and/or diarrhea.

**Eyes:** Overexposure in eyes may cause redness, itching and watering.

**Skin:** Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. Frostbite like symptoms. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some individuals.

**Inhalation:** Coughing, irritation of mucous membranes and upper respiratory tract.

4.4 Acute Health Effects:

Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of dusts can cause drowsiness, dizziness, headaches, and nausea.

4.5 Chronic Health Effects:

Overexposure may trigger asthma-like symptoms in some sensitive individuals. May also induce skin sensitization and respiratory hypersensitivity.

4.6 Target Organs:

Eyes, Skin, Respiratory System

4.7 Medical Conditions Aggravated by Exposure:

Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin).

5. FIREFIGHTING MEASURES

5.1 Fire & Explosion Hazards:

This product is not flammable. However, if involved in a fire, this product may decompose at high temperatures to form toxic gases, sulfur oxides, and aluminum oxide.

5.2 Extinguishing Methods:

Water, alcohol-resistant foam, co2, dry chemical, Halon (if permitted). Use water spray to cool unopened containers.

5.3 Firefighting Procedures:

Fight fires as for surrounding materials. As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Fight fire upwind. Avoid spraying water directly into storage containers because of danger of boil-over. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

6. ACCIDENTAL RELEASE MEASURES

6.1 Spills:

Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For small spills (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows). Remove spilled material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state, and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse. For large spills (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Transfer product to containers for recovery or disposal for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

7. HANDLING & STORAGE INFORMATION

7.1 Work & Hygiene Practices:

Avoid prolonged contact with the product. Avoid breathing dusts from this product. Avoid excessive dust generation. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink, or smoke while handling product.

7.2 Storage & Handling:

Keep this material away from heat, sparks, and open flame. Open containers slowly on a stable surface. Keep container closed tightly when not in use. Empty container may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, other light sources, or sources of intense heat. Store away from incompatible materials (See Section 10).

7.3 Special Precautions:

Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Exposure Limits:

<table>
<thead>
<tr>
<th>CHEMICAL NAME(S)</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TLV</td>
<td>STEL</td>
<td>ES-TWA</td>
<td>ES-PEAK</td>
</tr>
<tr>
<td>ALUMINUM SULPHATE</td>
<td>(2)</td>
<td>NA</td>
<td>NF</td>
<td>NF</td>
</tr>
</tbody>
</table>

8.2 Ventilation & Engineering Controls:

Use local or general exhaust ventilation to effectively remove and prevent buildup of dust or vapors generated from the handling of this product. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station). Periodic medical exams of exposed workers may be required.
8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.3 Respiratory Protection: Keep the exposure within legal limits. In the worker’s breathing zone and the general area, dusts must be kept below the TLVs and the equivalent exposure must compute to less than one. Keep exposure as low as possible. When dusts are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.

8.4 Eye Protection: Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants. Depending on the use of this product, splash or safety glasses may be worn. If necessary, refer to U.S. OSHA 29 CFR §1910.133, Canadian standards, or the European Standard EN166.

8.5 Hand Protection: If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or nitrile rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, the E.C. member states.

8.6 Body Protection: However, no special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the E.C. member states, or U.S. OSHA.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Appearance: White solid (crystals)
9.2 Odor: Odorless
9.3 Odor Threshold: NA
9.4 pH: NA
9.5 Melting Point/Freezing Point: 86.5 °C (187.7 °F)
9.6 Initial Boiling Point/Boiling Range: NA
9.7 Flashpoint: NA
9.8 Upper/Lower Flammability Limits: NA
9.9 Vapor Pressure: NA
9.10 Vapor Density: NA
9.11 Relative Density: 1.69 g/mL at 25 °C (77 °F)
9.12 Solubility: NA
9.13 Partition Coefficient (log P<sub>ow</sub>): NA
9.14 Autoignition Temperature: NA
9.15 Decomposition Temperature: 770 °C (1418 °F)
9.16 Viscosity: NA
9.17 Other Information: NA

10. STABILITY & REACTIVITY

10.1 Stability: Stable
10.2 Hazardous Decomposition Products: Sulfur oxides, aluminum oxide.
10.3 Hazardous Polymerization: Will not occur.
10.4 Conditions to Avoid: Exposure or contact to extreme temperatures, incompatible chemicals, moisture.
10.5 Incompatible Substances: Oxidizing agents, peroxides strong acids, and alkalis.

11. TOXICOLOGICAL INFORMATION

11.1 Routes of Entry: Inhalation: YES Absorption: YES Ingestion: YES
11.2 Toxicity Data: This product has NOT been tested on animals to obtain toxicity data. Toxicology data, found in scientific literature, is available for some of the components of the product: Aluminum Sulphate: LD<sub>50</sub> (oral, mouse) 6,207 mg/kg; LD<sub>50</sub> (dermal, rabbit) > 5,000 mg/kg.
11.3 Acute Toxicity: Moderate irritation to eyes and skin near affected areas.
11.4 Chronic Toxicity: This material may aggravate any pre-existing skin condition (e.g., dermatitis).
11.5 Suspected Carcinogen: No
11.6 Reproductive Toxicity: This product is not reported to produce reproductive toxicity in humans.
11.7 Mutagenicity: This product is not reported to produce mutagenic effects in humans.
11.8 Embryotoxicity: This product is not reported to produce embryotoxic effects in humans.
11.9 Teratogenicity: This product is not reported to cause teratogenic effects in humans.
11. TOXICOLOGICAL INFORMATION – cont’d

11.7 Irritancy of Product:
- General Nuisance Dusts: Nuisance dusts, which are essentially nontoxic and chemically non-irritating. Skin contact has shown no problems other than possible drying and mechanical irritation. Eye contact can produce particulate irritation. Excessive inhalation can produce mild pulmonary irritation and possible non-disabling slight fibrosis of the lungs. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.

11.8 Biological Exposure Indices: NE

11.9 Physician Recommendations: Treat symptomatically.

12. ECOLOGICAL INFORMATION

12.1 Environmental Stability: There are no specific data available for this product.

12.2 Effects on Plants & Animals: There are no specific data available for this product.

12.3 Effects on Aquatic Life:
- LC₅₀ (Danio rerio (zebra fish), 96h): > 87.5 mg/L
- LC₉₀ (Daphnia magna (water flea), 96h): 38.2 mg/L
- ErC₅₀ (Pseudokirchneriella subcapitata (microalgae), 24h): 0.24 mg/L
- EC₅₀ (Activated Sludge, 3h): > 200 mg/L

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal: Disposal should be in accordance with local, state, and federal regulations. Dispose of in accordance with federal, state, and local regulations.

13.2 Special Considerations: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the TDGR.

14.1 49 CFR (GND): UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (aluminum sulphate), 8, III, LTD QTY (IP VOL ≤ 5.0 kg)

14.2 IATA (AIR): UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (aluminum sulphate), 8, III, LTD QTY (IP VOL ≤ 1.0 kg)

14.3 IMDG (OCN): UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (aluminum sulphate), 8, III, LTD QTY (IP VOL ≤ 5.0 kg)

14.4 TDGR (Canadian GND): UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (aluminum sulphate), 8, III, LTD QTY (IP VOL ≤ 5.0 kg)

14.5 ADR/RID (EU): UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (aluminum sulphate), 8, III, LTD QTY (IP VOL ≤ 5.0 kg)

14.6 SCT (MEXICO): UN3260, SOLIDO CORROSIVO, ACIDO, INORGANICO, N.E.P. (sulfato de aluminio), 8, III, LTD QTY (IP VOL ≤ 5.0 kg)

14.7 ADGR (AUS): UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (aluminum sulphate), 8, III, LTD QTY (IP VOL ≤ 5.0 kg)

15. REGULATORY INFORMATION

15.1 SARA Reporting Requirements: This product does not contain any substances subject to SARA Title III, Section 313 reporting requirements.

15.2 SARA TPQ: There are no specific Threshold Planning Quantities for the components of this product.

15.3 TSCA Inventory Status: The components of this product are listed on the TSCA Inventory.

15.4 CERCLA Reportable Quantity: Aluminum Sulphate: 2,270 kg (5,000 lbs)

15.5 Other Federal Requirements: NA

15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List.

15.7 State Regulatory Information: Aluminum Sulphate is found on the following state criteria list: Massachusetts Hazardous Substances List (MA), New Jersey Right-to-Know List (NJ), and Pennsylvania Right-to-Know List (PA). No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).

15.8 Other Requirements: NA
16. OTHER INFORMATION

16.1 Other Information:

DANGER! MAY BE CORROSIVE TO METALS. CAUSES SERIOUS EYE DAMAGE.

Keep only in original container. Wash exposed skin areas thoroughly with soap and water after handling. Wear eye protection/face protection. IF ON SKIN: Wash with soap and water. If skin irritation or a rash occurs - Get medical advice/attention. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER/doctor. If eye irritation persists: Get medical advice/attention. Absorb spillage to prevent material damage. Store in corrosive resistant containers with a resistant inner liner. Dispose of contents/container to a licensed treatment, storage, or disposal facility (TSDF).

KEEP OUT OF REACH OF CHILDREN.

16.2 Terms & Definitions:

See last page of this Safety Data Sheet.

16.3 Disclaimer:

This Safety Data Sheet is offered pursuant to OSHA’s Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate’s & BlueGreen Water Technologies Ltd.’s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

16.4 Prepared for:

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16 HaMiktsoot Blvd,
Modi'in-Maccabim-Re’ut, Israel 7178096
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Fax: +1 (310) 370-5700
https://shipmate.com/
SAFETY DATA SHEET

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

- CAS No.: Chemical Abstract Service Number
- RTECS No.: Registry of Toxic Effects of Chemical Substances Number
- EU EINECS No.: European Inventory of Existing Commercial Chemical Substances Number

EXPOSURE LIMITS IN AIR:

- ACGIH: American Conference of Governmental Industrial Hygienists
- IDLH: Immediately Dangerous to Life and Health
- OSHA: U.S. Occupational Safety and Health Administration
- PEL: Permissible Exposure Limit
- STEL: Short Term Exposure Limit
- TLV: Threshold Limit Value
- TWA: Time Weighted Average

FIRST AID MEASURES:

- CPR: Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Minimal Hazard</td>
</tr>
<tr>
<td>1</td>
<td>Slight Hazard</td>
</tr>
<tr>
<td>2</td>
<td>Moderate Hazard</td>
</tr>
<tr>
<td>3</td>
<td>Severe Hazard</td>
</tr>
<tr>
<td>4</td>
<td>Extreme Hazard</td>
</tr>
</tbody>
</table>

PERSONAL PROTECTION RATINGS:

- A: Safety Glasses
- B: Splash Goggles
- C: Face Shield & Protective Eyewear
- D: Gloves
- E: Boots
- F: Protective Apron
- G: Protective Clothing & Full Suit
- H: Dust Respirator
- I: Full Face Respirator
- J: Dust & Vapor Half-Mask Respirator
- K: Airline Hood/Mask or SCBA
- X: Consult your supervisor or SOPs for special handling directions.

OTHER STANDARD ABBREVIATIONS:

- C=5: Carcinogenic
- I=1: Irritant
- NA: Not Available
- NR: No Results
- ND: Not Determined
- NE: Not Established
- NF: Not Found
- SCBA: Self-Contained Breathing Apparatus
- Sens: Sensitization
- STOT RE: Specific Target Organ Toxicity – Repeat Exposure
- STOT SE: Specific Target Organ Toxicity – Single Exposure

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:

- LEL: Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
- UEL: Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

- 0: Minimal Hazard
- 1: Slight Hazard
- 2: Moderate Hazard
- 3: Severe Hazard
- 4: Extreme Hazard

TOXICOLOGICAL INFORMATION:

- LD₅₀: Lethal Dose (solids & liquids) which kills 50% of the exposed animals
- LC₅₀: Lethal concentration (gases) which kills 50% of the exposed animal
- ppm: Concentration expressed in parts of material per million parts
- T₅₀: Lowest dose to cause a symptom
- TC₅₀: Lowest concentration to cause a symptom
- T₆₅, L₆₅, & L₆₅ or TC₅₀, L₅₀, & L₅₀: Lowest dose (or concentration) to cause lethal or toxic effects
- IARC: International Agency for Research on Cancer
- NTP: National Toxicology Program
- RTECS: Registry of Toxic Effects of Chemical Substances
- BCF: Biocorrelation Factor
- TL₅₀: Median threshold limit
- log K₅₀ or log K₆₀: Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

- WHMIS: Canadian Workplace Hazardous Material Information System
- DOT: U.S. Department of Transportation
- TC: Transport Canada
- EPA: U.S. Environmental Protection Agency
- DSL: Canadian Domestic Substance List
- NDSL: Canadian Non-Domestic Substance List
- PSL: Canadian Priority Substances List
- TSCA: U.S. Toxic Substance Control Act
- WGK: Wassergefährdungsklassen (German Water Hazard Class)
- TRGS900: Die Technischen Regeln für Gefahrstoffe (TRGS) - The Technical Rules for Hazardous Substances (TRGS) - Germany

CLP/GHS (1272/2008/EC) PICTOGRAMS:

- GHS01: Explosive
- GHS02: Flammable
- GHS03: Oxidizing
- GHS04: Pressurized
- GHS05: Corrosive
- GHS06: Toxic
- GHS07: Harmful
- GHS08: Health
- GHS09: Environment

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

- Class A: Compressed
- Class B: Flammable
- Class C: Oxidizing
- Class D1: Toxic
- Class D2: Irritation
- Class D3: Infectious
- Class E: Corrosive
- Class F: Reactive