



Material Safety Data Sheet

Revolution®

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## 1. HAZARDOUS INGREDIENTS

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**Composition:** Non-ionic surfactant/carrier blend – > 99% by weight (Listed on DSL inventory)

**WHMIS Classification:** Subdivision B ( Skin or Eye Irritant) of Division 2 (Materials Causing Other Toxic Effects) of Class D (Poisonous and Infectious Material) based on Acute Dermal Irritation Toxicity.

**Chemical Abstract Service (CAS) Number:** 61419-46-3

**EMERGENCY OVERVIEW:**

**Warning Statements:** NO PARTICULAR HAZARDS KNOWN.

**TOXICOLOGICAL INFORMATION:**

**Acute Dermal Toxicity:** Slightly irritating based on similar products. LD<sub>50</sub> oral/rat: > 2,000 mg/kg

**Acute Inhalation Toxicity:** No test data available for this product. LC<sub>50</sub> not determined.

**Acute Oral Toxicity:** No test data available for this product. LD<sub>50</sub> value not established.

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## 2. PREPARATION INFORMATION

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**Date of Preparation:** October 6, 2009

**Supersedes Date:** November 10, 2006

**Prepared By:** Irene Karas

Regulatory Manager

Aquatrols Corporation of America

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## 3. PRODUCT INFORMATION

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**PRODUCT AND COMPANY DESCRIPTION:**

**Distributor:** Aquatrols Corporation of America

1273 Imperial Way

Paulsboro, NJ 08066 USA

**For Product Information:** (800) 257-7797 or (856) 537-6003

Internet Address: [www.aquatrols.com](http://www.aquatrols.com)

**Emergency Phone Number:** For chemical emergency spill, leak, fire, exposure or accident, call CHEMTREC Day or Night: Domestic North America 800-424-9300. International call 703-527-3887 (collect calls accepted).

**Chemical Name or Synonym:** Non-ionic surfactant/carrier blend

**Product Use:** Soil Surfactant

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## 4. PHYSICAL DATA

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Physical and chemical properties here represent typical properties of this product. Contact the Quality Control Department using the Product Information phone number in Section 3 for exact specifications.

**PHYSICAL AND CHEMICAL PROPERTIES:**

**Physical Appearance:** Liquid – colorless

**Odor:** product specific

**Odor Threshold:** Not established

**pH:** 3.5 – 6.5

**Bulk Density:** 1.02 g/cm<sup>3</sup> (23°C)

**Water Solubility:** Fully soluble in water (15°C)

**Melting Point:** N/A

**Freezing Point:** N/A

**Boiling Point:** N/A

**Vapor Pressure:** Not established

**Vapor Density:**

**Percent Volatiles (vol.):** Not established

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**5. FIRE OR EXPLOSION HAZARD**

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**FIRE HAZARD DATA:**

**Conditions of Flammability:** Product will burn under fire conditions.

**Extinguishing Media:** water spray, dry extinguishing media, foam, carbon dioxide

**Flash Point:** > 100°C

**Method Used:** (DIN/ISO 2207)

**Flammability Limits (vol/vol%): Lower:** Not established    **Upper:** Not established

**Ignition Temperature:** >200 °C

**Special Fire Fighting Procedures:** None

**Unusual Fire and Explosion Hazards:** Product will burn under fire conditions

**Hazardous Decomposition Materials:**

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**6. REACTIVITY DATA**

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**STABILITY AND REACTIVITY DATA:**

Conditions to avoid:        Avoid humidity

Hazardous Reactions:        No hazardous reactions when stored and handled according to instructions.

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

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**7. TOXICOLOGICAL PROPERTIES**

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**POTENTIAL HEALTH EFFECTS:**

**Primary Route(s) of Entry:** Routes of entry include eye and skin contact and ingestion.

**EFFECTS OF OVEREXPOSURE:**

**Acute Eye:** May result in temporary irritation.

**Acute Skin:** Prolonged or repeated skin contact may result in slight, temporary irritation.

**Acute Inhalation:** Dusts that may be released in handling may cause symptoms typical of nuisance dusts, including coughing, sneezing and minor respiratory irritation.

**Acute Ingestion:** Surfactant blend is practically non-toxic. Carrier is not considered harmful by ingestion. However, ingestion of large amounts may result in diarrhea and weakness.

**Chronic Effects:** This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

**Exposure Guidelines:** No exposure limits have been established for this product.

**TOXICOLOGICAL INFORMATION:**

**Acute Eye Irritation:** Slightly irritating - Rabbit.

**Acute Skin Irritation:** Slightly irritating - Rabbit.

**Acute Dermal Toxicity:** No test data available for this product.

**Acute Respiratory Irritation:** No test data available for this product.

**Acute Inhalation Toxicity:** No test data available for this product.

**Acute Oral Toxicity:** No test data available for this product.

**Chronic Toxicity:** This product does not contain substances considered to be “probable or suspected” carcinogens.

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**8. PREVENTIVE MEASURES**

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**PERSONAL PROTECTIVE EQUIPMENT:**

**Introductory Remarks:** These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs.

**Respiratory Protection:** When work conditions are such that dusts or particulates may be generated or present, wear a NIOSH/MSHA dust/particulates approved respirator. Under normal conditions with adequate ventilation, no protection is necessary.



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**Eye/Face Protection:** Wear appropriate protective safety goggles/glasses to prevent splashing in eyes. A full faceshield and eyewash station are recommended.

**Skin Protection:** Skin contact should be minimized through the use of appropriate long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance. Nitrile or neoprene rubber gloves are also recommended.

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne contaminants to a minimum.

**Work Practice Controls:** Personal hygiene is an important control measure and the following general measures should be taken when working with or handling this material:

1. Do not store, use and/or consume foods, beverages, tobacco products or cosmetics in areas where this material is stored.
2. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.
3. Wash exposed skin promptly to remove accidental splashes of contact with this material.

**ACCIDENTAL RELEASE MEASURES:**

**Containment of Spill:** Sweep or otherwise collect directly into recovery drums and dispose of properly. A comprehensive spill response plan should be developed and implemented.

**Disposal of Waste Materials:** Dispose of in accordance with local and federal regulations. Disposal may include applying the product to turf per the label recommendations so long as it is not contaminated with other materials, or disposal in an authorized landfill facility.

**HANDLING AND STORAGE:**

**Handling:** Avoid direct or prolonged contact with skin and eyes. Avoid inhalation of dusts or particulates. Keep containers closed and use only with adequate ventilation. Wash hands before breaks and after working.

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**PREVENTIVE MEASURES CONT'**

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**Storage:** Keep containers closed. Store in a cool, dry, well-ventilated area.

**Special Shipping Information:** N/A (U.S. Department of Transportation Shipping Name: Non-regulated)

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**9. FIRST AID MEASURES**

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**Eye Exposure:** Do not rub eyes. Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes or more (if easy to do so, remove contact lenses); if irritation persists consult a physician (preferably an eye specialist).

**Skin Exposure:** In case of contact immediately wash with soap and water. Remove and launder contaminated clothing. Seek medical attention if necessary.

**Inhalation:** If respiratory irritation or distress occurs, remove individual from source of exposure to fresh air. Seek medical attention if respiratory irritation or distress continues.

**Ingestion:** If victim is conscious and alert, give 1-2 glasses of water to drink. Seek medical attention. Induce vomiting only upon advice of a physician.

**Medical Conditions Possibly Aggravated by Exposure:** Skin contact may aggravate existing skin conditions/diseases.

**Notes to Physicians:** All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

**Disclaimer:** While the information and recommendations set forth herein are believed to be accurate, we make no warranty with respect hereto and disclaim all liability from reliance thereon.

**End of MSDS Document**