PRODUCT NAME: **E-Z Clor Algaecide 50**  
EPA Registration Number: 42177-35

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Supplier**  
SCP Distributors LLC  
109 Northpark Boulevard,  
Covington, LA, 70433-5001  
USA

**Telephone:** +19858925521  
**Telefax:** +19858921657  
**Web:**

**Manufacturer**  
Advantis Technologies  
1200 Bluegrass Lakes Parkway  
Alpharetta, GA 30004  
United States of America

**REVISION DATE:** 05/26/2015  
**SUPERCEDES:** 12/12/2005

**MSDS Number:** 000000024513  
**SYNONYMS:** None  
**CHEMICAL FAMILY:** None established  
**DESCRIPTION / USE**  
**FORMULA:** None established

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification**  
Flammable liquids : Category 3  
Acute toxicity (Oral) : Category 4  
Skin corrosion : Category 1B  
Serious eye damage : Category 1  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)
Hazard pictograms:

- Flammable liquid and vapour.
- Harmful if swallowed.
- Causes severe skin burns and eye damage.
- Causes serious eye damage.
- May cause respiratory irritation.

Signal word: Danger

Hazard statements:
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.

Precautionary statements:

**Prevention:**
- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**
- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
- 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 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- P363 Wash contaminated clothing before reuse.
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

**Disposal:**
- P501 Dispose of contents/container to an approved waste
SAFETY DATA SHEET

disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS OR CHEMICAL NAME</th>
<th>CAS #</th>
<th>% RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY</td>
<td>68391-01-5</td>
<td>45 - 55</td>
</tr>
<tr>
<td>ISOPROPYL ALCOHOL</td>
<td>67-63-0</td>
<td>7 - 13</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General Advice: Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Inhalation: IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Skin Contact: IF ON SKIN OR CLOTHING: 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.

Eye Contact: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion: IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Notes to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA): Combustible material

Flammable Properties
Flash Point: 45 °C closed cup
Fire / Explosion Hazards: May be ignited by open flame. Vapors may form explosive mixture with air. Hazardous decomposition products formed under fire conditions.

Extinguishing Media: Dry powder  Foam  Carbon dioxide (CO2)  Water mist

Fire Fighting Instructions: Use water spray to cool unopened containers. In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suit, self-contained breathing apparatus.

Spill Mitigation Procedures
Air Release: Keep people away from and upwind of spill/leak.
Water Release: If the product contaminates rivers and lakes or drains inform respective authorities.
Land Release: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not contaminate ponds, waterways or ditches with chemical or used container.

Additional Spill Information: Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Evacuate personnel to safe areas. Remove all sources of ignition.

SECTION 7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapours, mist or gas. Ensure all equipment is electrically grounded before beginning transfer operations.

Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Do not freeze.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."
Empty Container Warning: Empty containers retain hazardous residue, dispose of accordingly.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Protective Equipment for Routine Use of Product

Respiratory Protection: Wear a NIOSH approved respirator if levels above the exposure limits are possible. A NIOSH approved air purifying respirator with organic vapor cartridge and N95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection: Avoid contact with skin. Impervious gloves, boots, apron, and a full impervious suit is recommended if exposure is possible to a large portion of the body.

Eye Protection: Chemical resistant goggles must be worn. Face-shield

Protective Clothing Type: Impervious clothing

General Protective Measures: Ensure that eyewash stations and safety showers are close to the workstation location.

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components (CAS-No.)</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis (Update)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISOPROPYL ALCOHOL (67-63-0)</td>
<td>TWA</td>
<td>200 ppm</td>
<td>ACGIH (02 2014)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>400 ppm</td>
<td>ACGIH (02 2014)</td>
</tr>
</tbody>
</table>

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid
Form: No data.
Color: No data.
Odor: No data.
Molecular Weight: None established
pH: 6.0 - 8.0
   () 100 g/l (as aqueous solution)
Boiling Point: no data available
Melting point/freezing point: No data
Density: no data available
Bulk Density: ()
Vapor Pressure: 32 hPa
Vapor Density: no data available
Viscosity: no data available
Solubility in Water: No data.
Partition coefficient n-octanol/water: No data
Evaporation Rate: no data available
Oxidizing: None established
Volatile, % by vol.: Not applicable
VOC Content 10 %
HAP Content Not applicable

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions.
Conditions to Avoid: Heat, flames and sparks.
Chemical Incompatibility: Strong oxidizing agents, Reducing agents
Hazardous Decomposition Products: Carbon oxides, Hydrogen chloride gas, aromatic amines
Decomposition Temperature: No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY ISOPROPYL ALCOHOL LD50 = 5,045 mg/kg Rat

Component Animal Toxicology
Dermal LD50 value:
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY ISOPROPYL ALCOHOL LD50 = 13,000 mg/kg Rabbit

Component Animal Toxicology
Inhalation LC50 value:
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY ISOPROPYL ALCOHOL Inhalation LC50 8 h = 16000 ppm Rat
SAFETY DATA SHEET

Product Animal Toxicity

Oral LD50 value: \( LD50 = 760 \, \text{mg/kg} \) Rat
Dermal LD50 value: \( LD50 > 1,700 \, \text{mg/kg} \) Rabbit
Inhalation LC50 value: no data available

Skin Irritation: Corrosive to skin
Eye Irritation: Corrosive to eyes
Skin Sensitization: This product has not been tested for skin sensitisation. However based on similar structured materials, this product is not expected to cause allergic skin sensitisation.

Acute Toxicity: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract.
Subchronic / Chronic Toxicity: There are no known or reported effects from repeated exposure except those secondary to burns.

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY
This product has been tested for Subchronic toxicity in laboratory animals and no systemic toxicity or target organ effects occurred in the test animals.

Reproductive and Developmental Toxicity:
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY
At high doses, maternal toxicity was observed. However, no developmental effects were observed.
ISOPROPYL ALCOHOL
This material at concentrations above the occupational exposure limits has caused developmental effects in animals. However, these effects were observed only at those doses that resulted in maternal toxicity.

Mutagenicity: Not known or reported to be mutagenic.
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY
This chemical has been tested and was shown to be non-mutagenic.
ISOPROPYL ALCOHOL
This material has been shown not to be mutagenic based on a battery of assays.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY
The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic.
ISOPROPYL ALCOHOL
The International Agency for Research on Cancer (IARC) has classified this product or a component of this product as a Group 3 substance, Unclassifiable as to its Carcinogenicity to Humans.

SECTION 12. ECOLOGICAL INFORMATION
Overview: Very toxic to aquatic life.

Ecological Toxicity Values - Product:
- LC50 Believed to be approximately 0.116 mg/l (calculated)

Ecological Toxicity Values for: QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKY
- Bluegill sunfish (static). 96 h LC50 = 0.52 mg/l
- Rainbow trout (Salmo gairdneri), (static). 96 h LC50 = 0.93 mg/l
- Sheepshead minnow (static). 96 h LC50 = 0.86 mg/l
- Daphnia magna, (static). 48 h EC50= 0.058 mg/l
- Mysis shrimp (static). 96 h LC50= 0.092 mg/l

Ecological Toxicity Values for: ISOPROPYL ALCOHOL
- Bluegill, (nominal, static). 96 h LC50 > 1,400 mg/l
- Pimephales promelas (fathead minnow), (measured, flow-through) 96 h LC50 10,400 mg/l
- Mosquito fish (nominal, static). 96 h LC50 > 1,400 mg/l
- Daphnia magna, (nominal, static). 24 h EC50 9,714 mg/l
- Common shrimp (Crangon crangon), (nominal, renewal). 48 h LC50 1,400 mg/l

SECTION 13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary: 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. As a hazardous liquid waste it must be disposed of in accordance with local, state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

DOT
UN number : 1760
Description of the goods : Corrosive liquids, n.o.s.
SAFETY DATA SHEET

Class: 8
Packing group: II
Labels: 8
Emergency Response: 154
Guidebook Number

TDG
UN number: 1760
Description of the goods: CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Class: 8
Packing group: II
Labels: 8

IATA
UN number: 1760
Description of the goods: Corrosive liquid, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Class: 8
Packing group: II
Labels: 8
Packing instruction (cargo aircraft): 855
Packing instruction (passenger aircraft): 851
Packing instruction (passenger aircraft): Y840

IMDG-CODE
UN number: 1760
Description of the goods: CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
Class: 8
Packing group: II
Labels: 8
EmS Number 1: F-A
EmS Number 2: S-B
Marine pollutant: yes

SECTION 15. REGULATORY INFORMATION
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

**Signal word**: DANGER!

**Hazard statements**:
- May be fatal if swallowed.
- May be fatal if absorbed through skin.
- May be fatal if inhaled.
- Corrosive. Causes skin burns.
- Corrosive. Causes irreversible eye damage.
- This pesticide is toxic to fish.
- This pesticide is toxic to aquatic invertebrates.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 302**

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

**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.

**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

**US State Regulations**

**Massachusetts Right To Know**
Isopropanol 67-63-0

Pennsylvania Right To Know

n-alkyldimethylbenzylammonium chloride 68391-01-5
Isopropanol 67-63-0

New Jersey Right To Know

n-alkyldimethylbenzylammonium chloride 68391-01-5
Isopropanol 67-63-0

California Prop 65

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

The components of this product are reported in the following inventories:

TSCA: This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

SECTIONS REVISED: First formulated version in SAP.
Major References: Available upon request.

This material safety data sheet (MSDS) has been prepared in compliance with the federal OSHA hazard communication standard, 29 CFR 1910.1200. The information in this MSDS should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations and management and for persons working with or handling this product. Arch chemicals believes this information to be reliable and up to date as of the date of publication but, makes no warranty that it is. Additionally, if this MSDS is more than three years old, you should contact Arch chemicals MSDS control at the phone number on the front page to make certain that this document is current.