SECTION I: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product name: PoaConstrictor Herbicide
EPA Registration Number: 94396-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use: Herbicide
Uses Advised Against: Activities contrary to label recommendations

1.3 Details of the supplier of the safety data sheet

Company: Aquatrols Corporation of America
1273 Imperial Way
Paulsboro, NJ 08066

Website: www.aquatrols.com

Phone number: (856) 537-6003

Email: jyichye@aquatrols.com

1.4 Emergency telephone

Phone number: CHEMTEL - (800) 255-3924
CHEMTEL INTERNATIONAL - +1-813-248-0585

SECTION II: Hazards Identification

2.1 Classification of the substance or mixture

Product description: -

Classification according to 29 CFR 1910.1200

Acute Toxicity – Inhalation (Vapors) Category 4

2.2 GHS label elements

WARNING
Hazards Statements: Harmful if inhaled.
Precautionary Statements - Prevention
Do not get in eyes, on skin or on clothing.
Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell

2.3 Other hazards which do not result in classification
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life
- May be harmful in contact with skin

### SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>8%</td>
</tr>
<tr>
<td>Ethofumesate</td>
<td>26225-79-6</td>
<td>42%</td>
</tr>
</tbody>
</table>

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

### SECTION IV: FIRST AID MEASURES

4.1 Description of first aid measures

**Protection of First-aiders:** Use personal protective equipment.

**Eye contact:** Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact: Wash off immediately with soap and plenty of water for at least 15 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 mouth-to-mouth if possible. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed.

Most Important Symptoms and Effects: No data available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician: Treat symptomatically.

SECTION V: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2). Dry chemical. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous decomposition products: No data available.

5.3 Advice for firefighters

Special protective equipment: Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Further information: No data available.
6.1 Personal precautions, protective equipment and emergency procedures.

Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbant such as clay, sand or soil. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

6.3 Methods and materials for containment and cleanup

Methods of containment: Stop leak if safe to do so.
Dam up with sand or inert earth (do not use combustible materials).

Recovery: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

Decontamination/cleaning: Clean contaminated surface thoroughly.
Wash non-recoverable remainder with large amounts of water.
Recover the cleaning water for subsequent disposal.
Decontaminate tools, equipment and personal protective equipment in a segregated area.

Disposal: Dispose of in accordance with local regulations.

6.4 Reference to other sections

See Section VII for Handling and Storage.
7.1 Precautions for safe handling of the substance/mixture.

Technical measures: Provide adequate ventilation.

Advice on safe handling and usage: Wear personal protective equipment. Avoid contact with skin and eyes. Keep out of reach of children.

Hygiene measures: Personal hygiene is an important workplace practice exposure control measure and the following general measures should be taken when working with or handling this material:
1) Do not eat, drink or smoke when using this product.
2) Remove and wash contaminated clothing before re-use.
3) Wear suitable gloves and eye/face protection.
4) Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Recommended: Keep container tightly closed in a dry, cool, well-ventilated place. Keep out of reach of children.

Incompatible materials: Strong oxidizing agents.

Storage stability

Storage temperature: No data available.

7.3 Specific end use(s)

See Section I
SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

General comments

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. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>Ceiling: 100 mg/m$^3$ aerosol only</td>
<td>(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m$^3$</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Exposure limits:
Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Protective measures:
Ensure that eyewash stations and safety showers are close to workstation. Emergency equipment immediately accessible, with instructions for use. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

Eye protection:
Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles.

Hand protection:
Chemical resistant gloves.

Body protection:
Long sleeved clothing. Long pants. Socks and footwear.
Respiratory protection: Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

Hygiene measures: Personal hygiene is an important workplace practice exposure control measure and the following general measures should be taken when working with or handling this material:

5) Do not eat, drink or smoke when using this product.
6) Remove and wash contaminated clothing before re-use.
7) Wear suitable gloves and eye/face protection.
8) Wash hands before breaks and immediately after handling the product.

**SECTION IX: CHEMICAL AND PHYSICAL PROPERTIES**

### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Creamy white</td>
</tr>
<tr>
<td>Odor</td>
<td>Faint Sulfur</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Safety Data Sheet
In accordance to OSHA Standard 29 CFR 1910.1200

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.14 g/ml (for Al)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition n-octanol/water</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity. Kinematic</td>
<td>No information available</td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**9.2 Other information**

- Softening point: No information available
- Molecular weight: No information available
- VOC Content: No information available
- Liquid Density: No information available

**SECTION X: STABILITY AND REACTIVITY**

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under normal conditions.

**10.3 Possibility of hazardous reactions**
Hazardous polymerization will not occur.

**10.4 Conditions to avoid**
Keep away from children.

**10.5 Incompatible materials**
Strong oxidizing agents.

**10.6 Hazardous decomposition products**
Carbon oxides.
11.1 Information on toxicological effects

**Acute toxicity**
- Acute oral toxicity: LD50 > 2,100 mg/kg rat
- Acute dermal toxicity: LD50 > 4,100 mg/kg rat
- Acute eye irritation: slight or negligible eye irritant

**Inhalation:** May cause irritation of respiratory tract.

**Serious eye damage/eye irritation**
- Eye irritation: May cause slight irritation.

**Skin corrosion/irritation**
- Skin irritation: Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

**Ingestion:** May be harmful if swallowed.

**Respiratory or skin sensitization**
- Sensitization: No information available.

**Mutagenicity**
- Genotoxicity in vitro: No data available.
- Genotoxicity in vivo: No data available.

**Carcinogenicity**
- Carcinogenicity: Ethofumesate: In two year feeding studies with animals, adverse effects were only observed at very high doses. These include, a reduced weight gain in males and increased liver weight in females (rats 5,000 ppm); an increase of liver weight in females (hamsters, 2,000 ppm); an increased liver weight in both males and females (dogs 20,000 ppm)
- Reproductive and developmental toxicity: Demonstrated no adverse effects on reproduction in a three generation rat reproduction study.
- Teratogenicity: No teratogenic effects were seen in rats at dose levels up to 8-0 mg/kg/day. In rabbits, no adverse effects of biological significance were observed at the low dose (30
mg/kg/day) slight embyrolethal effects were noted at 300 mg/kg/day; severe maternal toxicity and moderate embyrolethal effects were observed at the highest dose.

Toxicity for reproduction and development
Toxicity to reproduction/fertility: No data available
Developmental toxicity/teratogenicity: No data available

SECTION XII: ECOLOGICAL INFORMATION

12.1 Toxicity
Acute aquatic toxicity: May be toxic to fish

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
Does not bioaccumulate

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>-1.93</td>
</tr>
<tr>
<td>Ethofumesate</td>
<td>26225-79-6</td>
<td>2.70</td>
</tr>
</tbody>
</table>

12.4 Other adverse effects
No data available

SECTION XIII: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Advice on disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated containers: Refer to product label.
This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**Signal Word:** CAUTION

**Ventilation Control:** Pesticide applicators and workers: These workers must refer to the product labeling and directions for use in accordance with EPA Worker Protection Standard 40 CFR Part 170.

Keep out of Reach of Children. Prolonged or frequent repeated skin contact may cause allergic reaction in some individuals. May be toxic to fish.

### 15.1 Safety legislation specific for the substance or mixture

#### 15.1.1 EU-Regulations

No restrictions according to Annex XVII of REACH. Does not contain REACH candidate substances.

#### 15.1.2 Federal regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:
CERCLA
Not applicable

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RQ</th>
<th>CERCLA EHS RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol 107-21-1</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol 107-21-1 (8)</td>
<td>5000 lb</td>
</tr>
</tbody>
</table>

SARA Product RQ: 0

RCRA Pesticide Information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol 107-21-1 (8)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

15.2 State Regulations

State Right-to-Know: Not applicable

SECTION XVI: OTHER INFORMATION

NFPA HEALTH 1 FLAMMABILITY 0 INSTABILITY 0 PHYSICAL HAZARD -

More information

Abbreviations

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
EC50: Effective Dose 50%
CLP: Classification, Labelling and Packaging
CAS: Chemical Abstract Service
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
IATA-DGR: International Air Transport Association Dangerous Goods Regulations
GHS: Globally Harmonized System (GHS) of Labelling Chemical Products
REACH: Registration, Evaluation, Authorization and Restriction of Chemical Products

Preparation Date: 04 15 2019
Version: 1.0
Previous version: Not applicable
Reason for revision: New SDS

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