POOL TROL COPPER 7 ALGAECIDE SDS

I – PRODUCT IDENTIFICATION

Product: Pool Trol Copper 7 Algaecide
Chemical Family: A solution of copper triethanolamine complex in water
Formula: Not Applicable – mixture
CAS Number: 41121-61-3

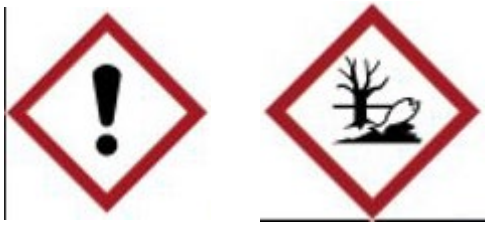
COMPANY IDENTIFICATION:	24 Hr EMERGENCY TELEPHONE NUMBER
Qualco, Inc. 225 Passaic Street Passaic, NJ 07055 Tel: 973-473-1222	Chemtrec: 1-800-424-9300

II – HAZARDS IDENTIFICATION

WARNING STATEMENTS AND WARNING PROPERTIES:
Do not take internally. May be harmful if swallowed or absorbed through the skin. Causes eye and mucous membrane irritation. May cause skin irritation. May cause respiratory irritation.

Human Threshold Response Data:
Odor Threshold: No data
Irritation Data: No data
Immediately dangerous to life or health: The IDLH concentration has not been established for this product

Primary Route(s) of Entry:
Ingestion: (X)
Inhalation: (X)
Skin Contact: (X)
Eye Contact: (X)



Carcinogenity Listings:
OSHA: 0
NTP: 0
IARC: 0

Primary Health Hazards (Acute and Chronic): See below.

Signs and Symptoms of Exposure:
Acute Ingestion: ingestion may cause gastrointestinal discomfort with any or all of the following symptoms: Nausea, vomiting, lethargy or diarrhea.
Chronic: There are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure
Acute Inhalation: If inhaled may cause irritation to the throat, mucous membranes, upper respiratory tract, and lungs. Any irritation would be expected to be transient with no permanent damage expected.
Chronic: No effects would be expected except for those listed under acute inhalation exposure.
Acute Skin Contact: Skin contact may cause an irritation consisting of transient redness. This irritant effect would not be expected to result in permanent damage.
Chronic: There are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure
Eye Contact: Contact with the eyes would be expected to cause an irritation consisting of redness, swell and mucous membrane discharge to the conjunctiva. No corneal damage or visual impairment would be expected to occur.
Medical conditions aggravated by exposure: None known or reported
Interactions with other chemicals which enhance toxicity: None known or reported.

III – COMPOSITION INFORMATION ON INGREDIENTS

Chemical or Common Name	**Exposure Limits**	
	OSHA PEL	ACGIH TLV

Triethanolamine complex with copper sulfate 50-60%	NE	NE
Water 40-50%	NE	NE

IV – FIRST AID MEASURES

Emergency and First Aid Procedures:

Ingestion: Immediately drink large quantities of water. Induce vomiting. Call a physician at once. DO NOT give anything by mouth if the person is unconscious or if having convulsions.

Inhalation: If person experiences nausea, headache, or dizziness, person should stop work immediately and move to fresh air until these symptoms disappear. If breathing is difficult, administer oxygen, keep the person warm and at rest. Call a physician. In the event that an individual inhales enough product to lose consciousness, person should be moved to fresh air at once and a physician should be called immediately. If breathing has stopped, artificial respiration should be given immediately. In all cases, ensure adequate ventilation and provide respiratory protection before the person returns to work.

Skin Contact: Immediately flush with water for fifteen minutes. Wash the contaminated skin with soap and water. If irritation develops, call a physician. If clothing comes in contact with the products, the clothing should be laundered before reuse.

Eye Contact: Immediately flush with large amounts of water for at least fifteen minutes, occasionally lifting the upper and lower eyelids. If eye irritation develops, call a physician.

V – FIRE FIGHTING MEASURES

Fire and Explosion Hazard Data

Flash Point: None

Auto-ignition Temperature: Not applicable

Flammable Limits:

LEL: Not applicable

UEL: Not applicable

Extinguishing Media: Not applicable. Choose extinguishing media suitable for surrounding materials.

Special Fire-Fighting Procedures: This product would not be expected to burn unless all the water is boiled away. The remaining organic compounds may be ignitable. Use when a spill or accident involving this product occurs. You are recommended to use a NIOSH/MSHA approved positive pressure supplied-air respirator. Additional protective clothing must be worn to prevent personal contact with this manual. Those items include but are not limited to: boots, gloves, splash-proof goggles.

Unusual Fire and Explosion Hazards:

Flammability Data:

Explosive: No

Flammable: No

Combustible: No

Pyrophoric: No

VI – ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is spilled or released:

For all transportation accidents, contact CHEMTREC at 1-800-434-9300

Evacuate all non-essential personnel. Stop source of spill as soon as possible and notify appropriate personnel.

Air Release: Vapors may be suppressed by the use of a water fog or spray. Contain all liquid for treatment or neutralization.

Water Release: This material is heavier than and miscible with water. Divert water flow around spill if possible and safe to do so. If unable to divert, create a dam to contain material. Continue to handle as described in land spill.

Land Spill: Create a dike or trench to contain materials. Spill materials may be adbsorbed using sand, clay or commercial absorbent. Do not place spill materials back in their original containers. Containerize and label all spill materials properly. Decontaminate all clothing and the spill area using a soap solution and flush with large amounts of water.

Spill Residues: Dispose of per guidelines under Waste Disposal Method.

Personal Protection for Emergency Spill and Fire-Fighting Situations: Additional respiratory protection is necessary when a spill or accident involving this product occurs. You are recommended to use a NIOSH/MSHA approved

positive pressure supplied-air respirator. Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to: boots, gloves, splash-proof goggles.

VII – HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storage: Store in a cool, dry, well-ventilated area. Do not store at temperatures above 100^{o}C (212^{o}F)
Other Precautions: Do not take internall. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water.
Shelf life limitations: 1-2 years under normal conditions.
Incomparable materials for storage or transport: Oxidizers

VIII – EXPOSURE CONTROL/PERSONAL PROTECTION

Respiratory Protection: Respirator protection not normally needed. If vapors, mists or aerosols are generated, wear a NIOSH/MSHA approved respirator.
Ventilation:
Local Exhaust: recommended if vapors, mists or aerosols are generated, otherwise use general exhaust ventilation.
Mechanical Exhaust:
Other Protective Clothing or Equipment: Equipment Specifications (when applicable):
Respirator Type: NIOSH/MSHA approved organic vapor plus dust/mist filter.
Protective ClothingType: Impervious: This includes gloves, boots, aprons, protective suit.
Skin and Eye Protective Equipment: Use chemical goggles and impermeable gloves.
Work/Hygienic Practices:

IX – PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	100^{o}C (212^{o}F)
Vapor Pressure (@25^{o}C):	No data
Vapor Density (Air=1):	No data
Solubility in Water:	Miscible
Appearance and Odor:	Clear Blue Odorless Liquid
Specific Gravity (H_2O=1):	1.3
Percent Volatile by Volume:	50%
Melting Point:	N/A
Evaporation Rate:	No data
Freezing Point:	0^{o}C (32^{o}F)
Bulk Density:	1.3 (g/cc)
pH @ 25^{o}C:	7.0
Molecular Weight:	No applicable/Mixture
Coefficient of oil/water distribution:	Insoluble in Oils

X – STABILITY AND REACTIVITY

Stability	( ) UnStable	(X) Stable – at normal temperatures

Incompatibility: Oxidizers
Hazardous Decomposition or By-Products: Carbon monoxide, carbon dioxide and oxides of nitrogen on combustion of dried product.

Hazardous Polymerization:	( ) May Occur	(X) Will Not Occur

Conditions To Avoid:
Mechanical Shock or Impact: No
Electrical (static) Discharge: No
NFPA Ratings: Not established

HMIS RATINGS:	Health: 1	Flammability: 0	Reactivity: 0

Summary of Reactivity:
Explosive: No
Oxidizer: No
Pyrophoric: No

Organic Peroxide: No
Water Reactive: No

XI – TOXICOLOGICAL INFORMATION

Animal Toxicology:
Acute Toxicity:
Inhalation LC50: No data
Dermal LD50: No data
Oral LD50: No data
Irritation: Causes eye irritation. May cause skin and respiratory irritation.
Target Organ Toxicity: Acute or Chronic: No know organs to be damaged from exposure to this product.
Reproductive and Development Toxicity: There are no known or reported effects on reproductive function or fetal development.
Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.
Mutagenicity: This product is not known or reported to be mutagenic.

XII – ECOLOGICAL INFORMATION

Aquatic Toxicity: No data
Avian Toxicity:
ENVIRONMENTAL HAZARDS: (PRA Notice 93-10)
This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notiftying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Method: If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.
As a non-hazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations by treatment to remove copper.

XIV – TRANSPORTATION DATA

DOT: Not Regulated
UN Proper Shipping Name: Not Regulated
Transport Hazard Class: Not Regulated
Packing Group: Not Regulated

Not Regulated, but when incividual container is over 3.3 gallons, then below information applies;
TDG: UN Number 3082
UN Proper Shipping Name: Environmentally Hazardous Substances, Liquid N.O.S. (Copper Triethanolamine Complex)
Transport Hazard Class: 9
Packing Group: III
Marine Pollutant: Yes

MEX: UN Number: 3082
UN Proper Shipping Name: Environmentally Hazardous Substances, Liquid N.O.S. (Copper Triethanolamine Complex)
Transport Hazard Class: 9
Packing Group: III
Marine Pollutant: Yes

IMDG: UN Number: 3082
UN Proper Shipping Name: Environmentally Hazardous Substances, Liquid N.O.S. (Copper Triethanolamine Complex)
Transport Hazard Class: 9
Packing Group: III
EMS No. F-A, S-F
Marine Pollutant: Yes

IATA: UN Number: 3082
UN Proper Shipping Name: Environmentally Hazardous Substances, Liquid N.O.S. (Copper Triethanolamine Complex)
Transport Hazard Class: 9
Packing Group: III

This chemical appears on the following lists:
(X) SARA Section 313: Supplier Notification Requirements, Per 40 CFR 372.45: This mixture or trade name product contains a toxic chemical or chemical is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reathorization Act of 1986 and 40 CFR 372.
Chemicals Listed are: Triethanolamine complex with copper sulfate (Copper compounds)
(X) TSCA: This product is regulated under the Federal insecticide, Fungicide and Rodenticide Act. The only registered use is an algaecide. A component of this product is not listed on the toxic Substance Control Act inventory.
OSHA: Hazard Classification: Eye, Skin and respiratory irritant
SARA Title III Hazard Categorized, per 40 CFR 370.2:
Health: Immediate (Acute)
Physical: None
Emergency Planning and Community Right To Know Per 40 CFR 355, App.A:
Extremely Hazardous Substance – Threshold Planning Quantity: None Established

XVI – ADDITIONAL INFORMATION

This MSDS replaces the 12/16/1996 version. Any changes in information are as follows:
In Section I – 24 hour emergency telephone number

ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL.

Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section XV of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

The information in this MSDS was obtained from sources, which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage,use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Issue Date: 11-26-13
Ref No: o55AAK
Revision Date: 05-28-24
Revision No: 2

POOL TROL PHOSPHATE REMOVER

1-CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Date Prepared: 7-19-2017
Material Identification: Pool Trol Phosphate Remover
Trade names and Synonyms: Lanthanum Chloride
Company Identification: Qualco Inc. / 225 Passaic Street / Passaic, NJ 07055
Phone Number: 973-473-1222 Emergency: CHEMTREC – 1-800-424-9300

2-HAZARDS IDENTIFICATION

Physical Hazards: Not classified
Health Hazards: Not classified
Environmental Hazards: Hazardous to the aquatic environment, acute & long-term hazard Category 1

OSHA defined hazards: Not classified
Signal word: Warning
Hazard Statement: Very toxic to aquatic life with long lasting effects.
Precautionary Statement:
Prevention: Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response: Wash hands after handling. Collect spillage.
Storage: Store in a well ventilated place. Keep container tightly closed.
Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC): None

3-COMPOSITION/INFORMATION ON INGREDIENTS

Substances
Chemical Name: Lanthanum Chloride, Hydrate, 100%
CAS Number: 20211-76-1

4-FIRST AID MEASURES

Inhalation: Move to fresh air.
Skin Contact: Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye Contact: Rinse with water. Get medical attention if irritation develops and persists.
Ingestion: Do not use mouth-to-mouth method if victim ingested the substance.
General Information: Ensure medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Provide general supportive measures and treat symptomatically.

5-FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire – water, fog, foam, dry chemical powder, carbon dioxide (CO_2).
Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical: None known.
Special Protective Equipment and Precautions for Firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire Fighting Equipment/Instructions: Use water spray to cool unopened containers.
Specific Methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: No unusual fire or explosion hazards noted.

6-ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up: This product is miscible in water. Prevent entry into waterways, sewers, basements or confined areas. Stop the flow of material, if this is without risk. Avoid dust formation. Prevent product from entering drains. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see Section 13 or the SDS. Small Dry Spills: With clean shovel, place material into clean, dry container and cover loosely; move containers from spill area.
Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water course or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7-HANDLING AND STORAGE

Precautions for Safe Handling: Use only with adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for Safe Storage Including Any Incompatibilities: Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8-EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No exposure limits noted for ingredient(s).
Biological Limit Values: No biological exposure limits noted for the ingredient(s)
Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas.
Individual Protection Measures, such as Personal Protective Equipment:
Eye/Face Protection: Wear chemical goggles.
Skin/Hand Protection: Wear appropriate chemical resistant gloves.
Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal Hazards: Wear appropriate thermal protective clothing, when necessary.
General Hygiene Considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9-PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Crystalline
Physical State: Liquid
Form: Liquid
Color: White
Odor: Odorless
Odor Threshold: Not available
pH: Not available
Melting Point/Freezing Point: 194^{o}F (90^{o}C) (loses water)
Initial boiling point and boiling range: Not available
Flash Point: Not available
Evaporation Rate: Not available
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits:
Flammability limit – lower (%): Not available
Flammability limit – upper (%): Not available
Explosive limit – lower (%): Not available
Explosive limit – upper (%): Not available

Vapor Pressure: Not available
Vapor Density: Not available
Relative Density: Not available
Solubility(ies) – In Water: Very soluble
Partition Coefficient (n-octanol/water): Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available
Other Information:
Molecular Formula: LaCl3 7H2O
Molecular Weight: 371.37

10-STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Hazardous polymerization does not occur.
Conditions to Avoid: Non known. Contact with incompatible materials.
Incompatible Materials: None known.
Hazardous Decomposition Products: No hazardous decomposition products are known.

11-TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:
Inhalation: No adverse effects due to inhalation are expected.
Skin Contact: No adverse effects due to skin contact are expected
Eye Contact: Direct contact with eyes may cause temporary irritation.
Ingestion: Expected to be a low ingestion hazard.
Symptoms Related to the physical, chemical and toxicological characteristics:
Information on toxicological effects:
Acute toxicity: The toxicological properties of this material have not been fully investigated and its handling and use may be hazardous.
Skin Corrosion/Irritation: Prolonged skin contact may cause temporary irritation.
Serious Eye Damage/Eye Irritation: None known.
Respiratory or skin sensitization:
Respiratory Sensitization: Not available.
Skin Sensitization: None known.
Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogencity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive Toxicity: This product is not expected to cause reproductive or developmental effects.
Specific Target Organ Toxicity:
Repeated Exposure: Not classified
Aspiration Hazard: Not available

12-ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic life with long lasting effects.
Product: lanthanum chloride, CAS #10025-84-0)
Species: Water flea (Daphnia carinata)
Test Results: 0.0432 mg/l, 48 hours
Persistence and degradability: None known
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13-DISPOSAL CONSIDERATIONS

Disposal Instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways ir ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local Disposal Regulations: Dispose in accordance with all applicable regulations.
Hazardous Waste Code: The waste code should be assigned in discussion between the user, the producer and the wash disposal company.
Waste from residues/Unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (se: Disposal instructions)
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain residue, follow label warning even after container is emptied.

14-TRANSPORTATION INFORMATION

DOT: Not regulated as dangerous goods.
IATA: Not regulated as dangerous goods.
IMDG: Not regulated as dangerous goods
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable

15-REGULATORY INFORMATION

US Federal Regulations: This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. All components are on the US EPA TSCA Inventory List.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpart D): Not regulated
CERCLA Hazardous Substance List (40 CFR 302.4): Not listed
SRA 304 Emergency Release Notification: Not regulated
Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard Categories:
Immediate Hazard: No
Delayed Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No
SARA 302 Extremely Hazardous Substance: Not Listed
SARA 311/312 (TRI Reporting): Not regulated
Other Federal Regulations:
Clean Air Act (Caa) Section 112 Hazardous Air Pollutants (HAPs) List: Not Regulated
Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130): Not Regulated
Safe Drinking Water Act (SDWA): Not Regulated
US State Regulations:
US California Controlled Substances: CA Dept. of Justice (California Health and Safety Code Section 11100): Not Listed
US Massachusetts RTK – Substance List: Not Regulated
US New Jersey Worker and Community Right To Know Act: Not Listed
US Pennsylvania Worker and Community Right To Know Act: Not Listed
US Rhode Island RTK: Not regulated
US California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16-OTHER INFORMATION

Issue Date: July 17, 2015
Rev. Date: July 15, 2021
Disclaimer: Qualco, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s

responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

SAFETY DATA SHEET
WINTER STAIN OUT

SECTION 1 – Chemical Product and Company Identification

MSDS Name: Winter Stain Out
Synonyms: Stain Eliminator, HEDP,
Company Identification: Qualco, Inc. / 225 Passaic Street / Passaic, NJ 07055
Company Phone Number: 973-473-1222
Emergency Phone Number: CHEMTREC – 1-800-424-9300

SECTION 2 – Hazards Identification

Avoid breathing vapors or spray mists. Corrosive to eyes, irritating to the skin and respiratory systems.

Primary Route(s) of Entry:

Ingestion: ( )
Inhalation: (X)
Skin Contact: (X)
Eye Contact: (X)

Primary Health Hazards (Acute and Chronic):

Acute:

Ingestion: Ingestion is not expected to be a primary route of exposure.

Inhalation: May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

Skin Contact: Hazardous in case of skin contact may produce burns. Itching, scaling, redness or occasional blistering characterizes skin inflammation.

Eye Contact: Very hazardous in case of eye contact (irritant, corrosive), redness watering and itching characterize inflammation of the eye.

Chronic:

Not toxic to aquatic organisms and not suspected of long term adverse effects in the aquatic environment.

Carcinogenity Listings:

OSHA: ( )
NTP: ( )
IARC: ( )

Signs & Symptoms of Exposure

Ingestion:
Inhalation:
Skin Contact:
Eye Contact:

SECTION 3 – Composition/Information on Ingredients

CAS NOS.: 2809-21-4
Chemical Name: 1-hydroxyethylidene-1, 1-disphosphonic acid
Also Contains: citric acid and water

SECTION 4 – First Aid Measures

Emergency and First Aid Procedures:

Ingestion: DO NOT induce vomiting. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one or two 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.

Inhalation: If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty breathing, or is cyanotic, seek medical attention immediately.

Skin Contact: Wash exposed area with plenty of soap and water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists, consult a health care professional.

Eye Contact: Flush immediately with copious amounts of tap water or normal saline solution for a minimum of 15 minutes. Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluations.

SECTION 5 – Fire Fighting Measures

Fire and Explosion Hazard Data:

Flash Point (Closed Cup): >100oC (212oF). (Tagliabue).

Flammable Limits: Not Available

LEL:

UEL:

Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Special Fire-fighting Procedures: Fire fighters should wear positive pressure self-contained breathing apparatus. (SCBA) and full turnout gear.

Unusual Fire and Explosion Hazards: None known

SECTION 6 – Accidental Release Measures

Steps To Be Taken In Case Material Is Spilled Or Released: IMPORTANT: Before responding to spill or leak from this product, review each section of this MSDS. Follow the recommendations given in the Handling Precaution sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of affected areas.

Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the products toxicological and chemical properties, and on the size and location of the spill, or leak access, the impact on contaminated environments (e.g. water systems, ground air equipments, etc.), there are not methods available to completely eliminate any toxicity this product many have on aquatic environments. Minimize adverse effects on these environments. Determine if Federal, State and/or local release notification is required. Recover as much of the pure product as possible into appropriate containers. Later determine if this recovered product can be used for its intended purpose. Address clean up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that cannot readily be recovered as pure product.

Flushing residual material to an industrial sewer, if present at the site of a spill, or leak incident, may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials.

SECTION 7 – Handling and Storage

Precautions To Be Taken In Handling and Storage: Rubber gloves, safety glasses or goggles , body protective clothing and shoes are required. Eyewash fountains in the workplace are recommended. If splashing can occur, a face shield is advisable. Provide dilution ventilation to control vapor and/or mist level. When misting may occur in the work area, a NIOSH/MSHA approved respirator may be required. Use a respirator approved for the material and level of exposure. A comprehensive respiratory protection program is needed when respirators must be used. The handling precautions for this product are based on characteristics of the neat product unless otherwise specified.

Other Precautions:

SECTION 8 – Exposure Controls, Personal Protection

Respiratory Protection: When misting may occur in the work area, a NIOSH/MSHA approved respirator may be required. Use a respirator approved for the material and level of exposure. A comprehensive respiratory protection program is needed when a respirator must be used.

Ventilation: Provide dilution ventilation to control vapor and/or mist level.

Local Exhaust:

Mechanical Exhaust:

Other Protective Clothing or Equipment: Rubber gloves, safety glasses or goggles, body protective clothing and shoes are required.

Work/Hygienic Practices: Eye wash fountains in the work place are recommended.

SECTION 9 – Physical and Chemical Properties

Boiling Point: 100^{o}C (212^{o}F)

Vapor Pressure (mm Hg): 17 mm of Hg (@20^{o}C)

Vapor Density (Air=1): 1.46 g/cm^{3} @20^{o}C (68^{o}F)

Solubility in Water: Soluble in cold or hot water

Appearance: Clear colorless liquid

Odor: Characteristic odor

Specific Gravity: (H2O=1)

Percent Volatile by Volume:

Melting Point: Not available

Evaporation Rate:

pH (Neat): Not Available

pH (100 ppm in water): Not available

o/w Partition Coefficient: Not available

Oxidizing/Reducing Properties: Not available

Viscosity: Dynamic: 64 Cp

Additional pH Information: pH (1% solution) = 2.0

SECTION 10 – Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatibilities with Other Materials: Strong oxidizers, strong bases.
Hazardous Decomposition Products: Oxides of both phosphorous and carbon; acids of phosphorous.
Hazardous Polymerization: Has not been reported.

SECTION 11 – Toxicological Information

Acute Toxicity:
Acute Oral: LD50=2000 mg/kg Rat
Acute Dermal: LD50=10000 mg/kg rabbit
Irritant Sensitization Effects: Very hazardous in case of eye contact (irritant, corrosive). Redness, watering and itching characterize inflammation of the eye. Hazardous in case of skin contact (irritant). Non-corrosive for skin. Non-sensitizer for skin. Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or occasional blistering.
Target Organ Toxicity: May cause damage to the following organs: blood, gastrointestinal tract, upper respiratory tract, skin, eyes, bones.
Reproductive and Development Toxicity:
Carcinogenicity: Not shown as a carcinogen by OSHA, IARC, or NTP.
Mutagenicity:
Other Health Effects: None Known.

SECTION 12 – Ecological Information

Aquatic Toxicity: Non-toxic to aquatic organisms and not suspected to long-term adverse effects in the aquatic environments.
LC50=>368 mg/l 96 hours Rainbow trout
LC50=527 mg/l 48 hours Daphnia magna
Avian Toxicity:

SECTION 13 – Disposal Considerations

Waste Disposal Method: Follow Federal, State and local regulations governing the disposal of waste materials.
Contaminated Materials: Determine if waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management.

SECTION 14 – Transport Information

US DOT
Shipping Name: Not Regulated
Hazard Class: Not applicable
UN Number: Not applicable
Packing Group: Not applicable

SECTION 15 – Regulatory Information

SARA Title III:

Section 302 Extremely Hazardous Substances List: No components of this product are listed.

Section 312 Hazard Categpry: Immediate (Acute) Health Hazard

Section 313 Toxic Chemical List: No components of this product are present above the de minimus levels

CERCLA: No components of this product are above de minimus levels.

FIFRA: This product is not a registered pesticide.

HMIS/NPCA Rating:

Health=2 Flammability=1 Reactivity= 1

NFPA Ratings:

Health=2 Flammability=1 Reactivity=1

State Regulations:

Various State Right To Know Acts: Non-proprietary hazardous chemicals are listed in Section II of this MSDS

SECTION 16 – Other Information

MSDS Creation Date: June 2010

Revision Date: December 2021

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.