



SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

ECI Part Number: LMO524

Date Prepared: 7/6/2015

Product Identity: QualiChem™ CI "Chloride Titrant"

Manufacture Name and Address: ECI Technology Inc.
60 Gordon Drive
Totowa, NJ 07512

Telephone Number for Information: 973-890-1114

Emergency Contact(24hrs): CHEMTREC
Domestic: 800-424-9300
International: 703-527-3887

Section 2. Hazards Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Classification:

Eye Irritation	-	Category	2A
Acute aquatic toxicity	-	Category	1
Chronic aquatic toxicity	-	Category	1

Signal Word: Warning



Hazard Statements:

Causes skin irritation
Causes serious eye irritation
May cause damage to organs through prolonged or repeated exposure
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects.

Precautionary Statements



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Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Avoid release to the environment

Response

IF exposed or concerned: Get medical attention/advice

Skin

IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Section 3: Composition / Information on Ingredients

Components	CAS Registry #	Concentration
Silver nitrate	7761-88-8	1 – 2%
DI Water	7732-18-5	98 – 99%

Section 4. First Aid Measures – In All Cases, Seek Qualified Medical Help

EYE CONTACT:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention..

INHALATION:

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

SKIN CONTACT:

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

INGESTION:

Obtain medical attention.



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Section 5. Fire Fighting Measures

FLAMMABLE PROPERTIES:

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire

EXTINGUISHING MEDIA:

Use agent most appropriate to extinguish surrounding fire.

FIRE & EXPLOSION HAZARDS:

No specific fire or explosion hazards

FIRE FIGHTING INSTRUCTIONS:

Use agent most appropriate to extinguish surrounding fire.

FIRE FIGHTING EQUIPMENT:

Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6. Accidental Release Measures

Absorb with suitable material and dispose of in accordance with local regulations.

Section 7. Handling and Storage

Handling

Wear personal protective equipment. Ensure adequate ventilation. Do not breathe vapors, spray or mist. Avoid contact with skin, eyes and clothing.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8. Exposure Controls / Personal Protection

Exposure Limits:

Component:

Silver nitrate

ACGIH TLV

TWA: 1 mg/m³

Regulations:

OSHA PEL

TWA: 1 mg/m³

ENGINEERING CONTROLS:

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

RESPIRATORY PROTECTION:



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Normal room ventilation is adequate

SKIN PROTECTION:

Chemical resistant gloves are recommended

EYE PROTECTION:

Safety glasses or goggles.

Section 9. Physical and Chemical Properties

Physical State Liquid

Appearance Colorless

Odor Odorless

Odor Threshold No information available

pH 5 - 7

Melting Point/Range Approx. 0

Boiling Point/Range Approx 100

Flash Point Not applicable

Evaporation Rate > 1 (Ether = 1.0)

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available

Lower No data available

Vapor Pressure 14 mmHg @ 20 °C

Vapor Density 0.7 (Air = 1.0)

Relative Density 1.0 - 1.1

Solubility Soluble in water

Autoignition Temperature No information available

Decomposition Temperature No information available

Viscosity No information available

Section 10. Stability and Reactivity

CHEMICAL STABILITY:

Stable under normal conditions of use and storage.

INCOMPATIBILITY:

Strong bases, ammonia, alcohols, strong reducing agents, magnesium

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition can lead to release of irritating gases and vapors

HAZARDOUS POLYMERIZATION:

Will not occur.



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Section 11. Toxicological Information

Toxicology Values

Component	Description	Route	Animal		Value
Silver nitrate	LD50	Oral	Rat	-	1173 mg/kg
Silver nitrate	LC50	-	Freshwater Fish (Leuciscus idus)	-	0.029mg/L/96h

Target Organs: Eyes, Skin

Chronic Effects/ Carcinogenicity: None

Teratology (Birth Defect) Information:

No information found

Reproduction Information:

No information found

Section 12. Ecological Information

ECOTOXICOLOGICAL INFORMATION:

Component:

Silver nitrate

Effect:

Very toxic to aquatic life

CHEMICAL FATE INFORMATION:

Component:

Silver nitrate

Effect:

This material is highly persistent in the aquatic environment, with half-life or greater than 200 days.

Section 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14. Transport Information (Not meant to be all inclusive)

D.O.T. SHIPPING NAME: Silver Nitrate



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D.O.T. HAZARD CLASS:	5.1
U.N. NUMBER:	UN1493
PACKING GROUP:	II
D.O.T. LABEL:	Oxidizer
I.A.T.A. SHIPPING NAME:	Silver Nitrate
I.A.T.A. HAZARD CLASS:	5.1
U.N. NUMBER:	UN1493
PACKING GROUP:	II

Section 15. Regulatory Information (Not meant to be all inclusive)

U.S. Federal Regulations

TSCA Status:

All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

TSCA 12(b)	Not listed
SARA 313	Not listed

SARA 313	Listed (313c)
SARA 302 Extremely Hazardous Substances:	Not listed
SARA 311/312 Hazardous Categorization:	Not listed

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Section 16. Other Information

Disclaimer

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