



MATERIAL SAFETY DATA SHEET (MSDS)

Date of Issue: 7/13/2015

QualiChem™ Ag-R1 "Ag Reagent 1"

Page 1 of 5

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the Preparation:

ECI p/n: LMO766 QualiChem™ Ag-R1 "Ag Reagent 1"

Product use:

Reagent

Company/Undertaking:

Manufacturer:
ECI Technology, Inc.
60 Gordon Drive
Totowa, NJ 07512

Emergency Telephone Number During Transportation:

+1-973-890-1114 (USA)

2 HAZARDS IDENTIFICATION

Emergency Overview

Danger! Potential adverse effects on fertility or fetuses. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.



Health Hazard

HMIS rating: 0*-0-0 (acute rating) * - Indicates chronic (long term) health effect may result from repeated exposure.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Component	Synonym	CAS No.	Wt %	EINECS No.	Hazard of Pure Substance
Potassium Iodide	--	7681-11-0	0.1<x<1	231-659-4	Reproductive Toxin
Water	--	7732-18-5	balance	231-791-2	Not Hazardous

4 FIRST AID MEASURES

Emergency and First Aid Procedures:

Ingestion:	If victim is conscious and alert, give 2-4 cupfuls of milk or water to dilute stomach contents. Get medical attention.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin Contact:	In case of contact, flush skin with water for at least 15 minutes



MATERIAL SAFETY DATA SHEET (MSDS)

QualiChem™ Ag-R1 “Ag Reagent 1”

Page 2 of 5

while removing contaminated clothing, shoes. Wash clothing before reuse.
Eye Contact: In case of contact, flush immediately with water for at least 15 minutes.
Seek medical attention as necessary.

5 FIRE FIGHTING MEASURES

Fire Hazards: Product is not combustible.

Suitable Fire Extinguishing Media: Use water spray or other media appropriate for surrounding fire.

Unsuitable Fire Extinguishing Media: None

Special Fire Fighting Procedures: Wear self-contained breathing apparatus with full face piece in positive pressure mode and proper protective clothing.

Unusual Fire and Explosion Hazards: None

Decomposition Products: Will produce hydrogen iodide.

6 ACCIDENTAL RELEASE MEASURES

General Information: When cleaning up spills, use proper personal protective equipment as indicated in Section 8. Avoid discharge to drains and to the environment.

Spills/Leaks: Contain and absorb spilled product with inert material (cat litter, sand, vermiculite) while wearing appropriate personal protective equipment. Using clean shovel, place in clean container and cover for waste disposal per Section 13.

7 HANDLING AND STORAGE

Handling: Avoid product contact with skin, eyes, and clothing. Avoid ingestion and inhalation of vapors. Wear protective clothing including chemical gloves and eye protection. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Operations should be conducted in a well ventilated area or hood.

Storage: Product is light sensitive. Store in tightly closed amber glass containers in cool, dry, dark storage area. Do not store with incompatible chemicals. Store locked up.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Limits:

Source:

RTECS

Component

CAS No.

ACGIH/TLV

OSHA/PEL

Japan

Potassium Iodide

7681-11-0

No data

No data

No data

Respiratory protection: Use general or local exhaust ventilation to meet TLV requirements.

Personal respirators: Not required with adequate ventilation. If airborne concentration exceeds TLV, use appropriate air purifying respiratory or self-contained breathing apparatus.

Skin and body protection: Avoid skin contact; wear chemical gloves (not rubber) and protective clothing (lab coat, apron, coveralls). Gloves subject to permeation or degradation must be replaced.

Eye protection: Use chemical safety glasses and/or a full face shield where splashing is possible. Maintain safety shower and eyewash facilities in work area.



MATERIAL SAFETY DATA SHEET (MSDS)

QualiChem™ Ag-R1 "Ag Reagent 1"

Page 3 of 5

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor	Light brown liquid	Vapor Pressure (mmHg)	No data
Flash Point °C (°F)	Not applicable	Vapor Density (air =1)	No data
Auto Ignition Temp °C (°F)	Not applicable	Evaporation Rate	No data
Boiling Point °C (°F)	Approx. 100 (212)	% Volatiles by volume	No data
Melting Point °C (°F)	Approx. 0 (32)	Physical State (@STP)	Liquid
pH	Neutral	Partition Coefficient	No data
Specific Gravity (H ₂ O=1)	1.0	Solubility (H ₂ O)	miscible

10 STABILITY AND REACTIVITY

Chemical Stability:	Stable
Hazardous Reactions:	None known
Conditions to Avoid:	Light, heat
Incompatible Materials:	Rubber, alkali and alkaline earth metals, reactive organic and inorganic chemicals.
Hazardous Decomposition Products:	Hydrogen iodide

11 TOXICOLOGICAL INFORMATION

A. Toxicity of Components

Potassium Iodide	Oral rabbit LD ₅₀ 916 mg/kg as pure substance
	Intravenous rate LD ₅₀ 167 mg/kg as pure substance

Source: RTECS

Carcinogenicity: No **NTP:** No **IARC:** No **Z list:** No **OSHA Reg:** No

Reproductive Effects: This product contains a component that has shown to cause reproductive effects in laboratory animals and humans. See RTECS reports TT2975000.

B. Effects of Overexposure:

Inhalation:	None expected
Skin Contact:	None expected
Eye Contact:	None expected
Skin Absorption:	None expected
Ingestion:	May cause irritation of the digestive tract; nausea, vomiting, diarrhea
Chronic Effects:	Chronic exposure can cause iodism
Target Organs:	Thyroid
Likely Routes of Exposure:	Skin contact, eye contact
Medical Conditions Generally Aggravated by Exposure:	None known



MATERIAL SAFETY DATA SHEET (MSDS)

QualiChem™ Ag-R1 “Ag Reagent 1”

Page 4 of 5

12 ECOLOGICAL INFORMATION

Aquatic and Terrestrial Toxicity: No data
Persistence and degradability: No data
Bioaccumulative potential: No data
Mobility in soil: No data
Other adverse effects: No data

13 DISPOSAL CONSIDERATIONS

Disposal Procedure: Dispose of product in accordance with waste management laws of the government. Waste material may be solidified and landfill disposed at a fully permitted facility. Rinse container with water prior to landfill disposal or recycling. Dispose of rinse water as stated above.

USA: This product, in its original form and concentration, would not designate as a federal hazardous waste.

14 TRANSPORT INFORMATION

UN/NA: Material not Regulated for Transportation – All Modes

Proper Shipping Name:

Hazard Class:

Packing Group:

Marine Pollutant:

Emergency Response Guide (ERG):

15 REGULATORY INFORMATION

United States

TSCA: All components are listed on the TSCA chemical inventory.

CERCLA: None listed.

SARA Title III: None listed.

Japan

Classification, labeling and MSDS were prepared in conformance with JIS Z 7250:2005, JIS Z 7251:2006 and GHS:2nd Edition

Components are existing chemicals under the Chemical Substance Control Law

16 OTHER INFORMATION

Product Warning Label

EECI-LMO766J-05 QualiChem™ Ag-R1 “Ag Reagent 1” (500ml)

EECI-LMO766J-1 QualiChem™ Ag-R1 “Ag Reagent 1” (1L)

EECI-LMO766J-4 QualiChem™ Ag-R1 “Ag Reagent 1” (4L)

Hazard Symbols: Health Hazard

Hazard Statement: Potential adverse effects on fertility or fetuses

Signal Word: Danger

Precautionary Statements:

Read MSDS before handling this product.



MATERIAL SAFETY DATA SHEET (MSDS)

QualiChem™ Ag-R1 “Ag Reagent 1”

Page 5 of 5

Use personal protective equipment as required.

If exposed or concerned: Get medical attention.

Store locked up. Dispose of container in accordance with government regulations.

Disclaimer

Information presented herein has been collected from sources believed to be reliable. No attempt has been made to independently verify each item of information provided. No warranty, express or implied, is made regarding the information provided and ECI Technology, Inc. and Moses Lake Industries, Inc., accept no legal responsibility or liability for any damages that may result from use of or reliance on information provided herein.