

Issuing Date 12/2/2011

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SALINITY INDICATOR REAGENT A
Product Code(s) 7460
Recommended Use Test kit reagent. Industrial (not for food or food contact use). Laboratory chemicals.
Company LaMotte Company, Inc.
 802 Washington Avenue
 P.O. Box 329
 Chestertown, MD 21620
 USA
Emergency Telephone Number 24 Hour Emergency Number (CHEM-TEL):
 USA, Canada, Puerto Rico 1-800-255-3924
 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION
DANGER!
Emergency Overview

Corrosive

The product causes burns of eyes, skin and mucous membranes

Harmful if swallowed

Harmful by inhalation

Cancer hazard

Appearance Clear, Yellow, Liquid

Physical State Liquid

Odor None

Potential Health Effects
Principle Routes of Exposure Skin and eye contact, Ingestion.

Acute Toxicity
Eyes

Liquid may cause severe irritation and possible eye damage.

Skin

Contact can cause severe skin irritation. Effects are expected to be less severe than for exposures to higher concentrations which symptoms include severe burns, pain, redness.

Inhalation

May cause irritation of respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Effects are expected to be less severe than for exposure to higher concentrations which symptoms can include coughing, nausea, vomiting.

Ingestion

Harmful if swallowed. Causes irritation or burns to the digestive and respiratory tract. May cause adverse kidney effects. May cause adverse liver effects.

Chronic Effects

Prolonged exposure may cause chronic effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Silver nitrate	7761-88-8	<0.01
Potassium chromate	7789-00-6	5
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes while removing all contaminated clothing and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.
Ingestion	Do not induce vomiting without medical advice. Rinse mouth with water and afterwards drink plenty of water or milk. Never give anything by mouth to an unconscious person. Consult a physician.
Protection of First-aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable.			
Flash Point	Not applicable			
Suitable Extinguishing Media	Dry chemical, CO ₂ , alcohol-resistant foam or water spray.			
Explosion Data				
NFPA	Health Hazard 2	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to Section 8. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes, and clothing.
Methods for Containment	Soak up with inert absorbent material, containerize, and hold for disposal. Do not flush to sewer.
Methods for Cleaning Up	Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.
Storage	Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from direct sunlight. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Silver nitrate 7761-88-8	TWA: 0.01 mg/m ³	TWA: 0.01 mg/m ³	IDLH: 10 mg/m ³ TWA: 0.01 mg/m ³
Potassium chromate 7789-00-6	TWA: 0.01 mg/m ³ TWA: 0.05 mg/m ³	TWA: 5 µg/m ³	IDLH: 15 mg/m ³ TWA: 0.001 mg/m ³
Water 7732-18-5	None Known	None Known	None Known

NIOSH IDLH: Immediately Dangerous to Life or Health

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

Personal Protective Equipment

Eye/Face Protection

Safety glasses with side-shields.

Skin and Body Protection

Wear protective gloves/clothing. Gloves & Lab Coat.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Yellow Liquid	Odor	None
Physical State	Liquid	pH	9
Flash Point	Not applicable	Boiling Point/Range	ca. 100°C/212°F

Vapor Pressure	No information available	Vapor Density	No information available
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10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use and storage.
Incompatible Products	Strong reducing agents. Hydrazine.
Conditions to Avoid	Excessive heat. Incompatible products. Direct sunlight.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Silver nitrate	1173 mg/kg (Rat)	None Known	None Known
Potassium chromate	180mg/kg (mouse)	None Known	None Known
Water	90 mL/kg (Rat)	None Known	None Known

Chronic Toxicity

Chronic Toxicity Prolonged exposure may cause chronic effects.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). Potassium chromate.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silver nitrate	None Known	None Known	None Known	None Known
Potassium chromate	A1	Group 1	Known	X
Water	None Known	None Known	None Known	None Known

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Silver nitrate	None Known	None Known	None Known
Potassium chromate	None Known	None Known	None Known
Water	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Silver nitrate	None Known	LC50= 0.0056 mg/L Pimephales promelas 96 h LC50= 0.006 mg/L Oncorhynchus mykiss 96 h LC50= 0.0064 mg/L Pimephales promelas 96 h LC50= 0.00644 mg/L Poecilia reticulata 96 h LC50= 0.007 mg/L Lepomis macrochirus 96 h LC50= 0.0085 mg/L Poecilia reticulata 96 h LC50= 0.0094 mg/L Pimephales promelas 96 h	EC50 = 0.038 mg/L 24 h EC50 = 0.395 mg/l 15 min EC50 = 0.44 mg/L 30 min EC50 = 0.86 mg/L 15 min	EC50 = 0.0006 mg/L 48 h EC50 = 0.9 µg/L 48 h LC50 = 5 µg/L 96 h
Potassium chromate	None Known	None Known	None Known	None Known
Water	None Known	None Known	None Known	None Known

Chemical Name	Log Pow
Silver nitrate	None Known
Potassium chromate	None Known
Water	None Known

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of contents/container in accordance with local regulation.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Silver nitrate - 7761-88-8	None Known	None Known	None Known	None Known
Potassium chromate - 7789-00-6	None Known	None Known	None Known	None Known
Water - 7732-18-5	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Silver nitrate 7761-88-8 (<0.01)	Present	X	X	1-8	X	KE-31281	X	X
Potassium chromate 7789-00-6 (5)	R	X	X	1-661	X	KE-29089	X	X
Water 7732-18-5 (to 100%)	Present	X	X	ENCS	X	KE-35400	X	X

U.S. 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

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Silver nitrate	7761-88-8	<0.01	1.0
Potassium chromate	7789-00-6	5	0.1
Water	7732-18-5	to 100%	None Known

SARA 311/312 Hazard Categories

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

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Silver nitrate 7761-88-8 (<0.01)	1 lb	X	None Known	X
Potassium chromate 7789-00-6 (5)	10 lb	X	None Known	X
Water 7732-18-5 (to 100%)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Silver nitrate	7761-88-8	<0.01	None Known	None Known	None Known	None Known
Potassium chromate	7789-00-6	5	Present (includes any unique chemical substance that contains Chromium as part of its infrastructure)	None Known	None Known	None Known
Water	7732-18-5	to 100%	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Silver nitrate	1 lb	None Known
Potassium chromate	10 lb	None Known
Water	None Known	None Known

U.S. State Regulations

California Proposition 65

WARNING! This product contains a chemical known to the State of California to cause cancer

Chemical Name	CAS-No	California Prop. 65
Silver nitrate	7761-88-8	None Known
Potassium chromate	7789-00-6	Carcinogen
Water	7732-18-5	None Known

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Silver nitrate	X	X	X	None Known	X
Potassium chromate	X	X	X	X	X
Water	None Known	None Known	None Known	None Known	None Known

International Regulations

Mexico - Grade

Chemical Name	Carcinogen Status	Exposure Limits
Silver nitrate	None Known	Mexico: TWA= 0.01 mg/m ³
Potassium chromate	A1	Mexico: TWA= 0.01 mg/m ³ Mexico: TWA= 0.05 mg/m ³ Mexico: TWA= 0.5 mg/m ³
Water	None Known	None Known

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

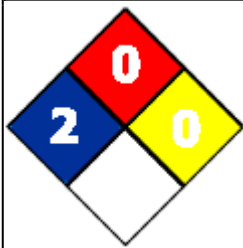

Component	WHMIS Hazard Class
Silver nitrate 7761-88-8 (<0.01)	1 % C E
Potassium chromate 7789-00-6 (5)	1 % C D2A D2B
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria



Chemical Name	NPRI
Silver nitrate	X

Potassium chromate	X
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16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0		
Health Hazard	2								
Fire Hazard	0								
Reactivity	0								

Prepared By Regulatory Affairs Department

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Revision Note
Initial Release

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS