### **SECTION 1: Identification**

#### 1.1. Product Identifier

Trade Name or Designation: Silver AA Standard, 1000 ppm Ag in H<sub>2</sub>O

Product Number: AAG1KW

Other Identifying Product Numbers: AAG1KW-100, AAG1KW-500

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive

Arlington, TX 76012 USA

Telephone: 888-467-4222

#### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

## **SECTION 2: Hazard(s) Identification**

#### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

	Hazard Hazard			
Hazard Class	Category	Statement	Precautionary Statements	
Reproductive Toxicity	Category 2	H361	P201, P202, P280, P308+P313, P405, P501	

#### 2.2. GHS Label Elements

Pictograms:



Signal Word: Warning

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#### **Hazard Statements:**

Hazard Number	Hazard Statement
H361	Suspected of damaging fertility or the unborn child.

#### **Precautionary Statements:**

Precautionary Number	Precautionary Statement	
P201	Obtain special instructions before use.	
P202	Do not handle until all safety precautions have been read and understood.	
P280	Wear protective gloves and eye protection.	
P308+P313	IF exposed or concerned: Get medical attention.	
P405	Store locked up.	
P501	Dispose of contents in accordance with local, state, federal and international regulations.	

#### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

#### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## **SECTION 3: Composition / Information on Ingredients**

#### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	99.84%
Silver Nitrate	$AgNO_{\scriptscriptstyle 3}$	169.87 g/mol	7761-88-8	0.16%

## **SECTION 4: First-Aid Measures**

#### 4.1. General First Aid Information

**Eye Contact:** May cause slight irritation.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** May cause irritation and temporary discoloration of skin.

**Ingestion:** Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

#### 4.2. Most Important Symptoms and Effects, Acute and Delayed

CAUTION! May be fatal if swallowed. Will temporarily discolor skin. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause irritation and temporary discoloration of skin.

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### 4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

## **SECTION 5: Fire-Fighting Measures**

#### 5.1. Extinguishing Media

Use water or water spray on small fires. Do not use dry chemicals or carbon dioxide.

#### 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

#### 5.3. Special Protective Equipment for Firefighters

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

#### **SECTION 6: Accidental Release Measures**

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

#### 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal. Do not flush to sewer. Dispose of in accordance with local regulations.

## **SECTION 7: Handling and Storage**

## 7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Protect from light.

## **SECTION 8: Exposure Controls / Personal Protection**

#### 8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Silver Nitrate (7761-88-8)	TWA	USA	0.01 mg/m³ TWA (as Ag)	U.S OSHA - Final PELs - Time Weighted Averages (TWAs)
Silver Nitrate (7761-88-8)	TLV-TWA	USA	0.01 mg/m³ TWA (as Ag)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

#### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves. **Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

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#### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

### **SECTION 9: Physical and Chemical Properties**

#### 9.1. Basic Physical and Chemical Properties

Appearance: Colorless liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

**pH:** Data not available.

Melting/Freezing Point: 0.0°C

Initial Boiling Point /Range: 100°C - 100°C

Flash Point: Data not available.

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: Data not available.

Vapor Density: Data not available.

Relative Density: 1.00

Solubility: Miscible

Partition Coefficient (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

**Decomposition Temperature:** Data not available.

Viscosity: Data not available.

**ExplosiveProperties:** Data not available.

Oxidizing Properties: Data not available.

## **SECTION 10: Stability and Reactivity**

#### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Ammonium Hydroxide, Organic Materials, Sulfides, Charcoal, Acetylene, Calcium Carbide, Ethanol, reducing agents, alkalis, Antimony salts, Arsenite

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#### 10.4. Hazardous Decomposition Products

Will not occur.

## **SECTION 11: Toxicological Information**

### 11.1. Information on Toxicological Effects

#### **Acute Toxicity - Oral Exposure:**

Not applicable.

#### **Acute Toxicity - Dermal Exposure:**

Not applicable.

#### **Acute Toxicity - Inhalation Exposure:**

Not applicable.

#### **Acute Toxicity - Other Information:**

LD50, Oral, Rat: (Silver Nitrate) 1173 mg/kg. Toxic effects: behavioral - tetany; Lungs, throat or respiration - cyanosis; Gastrointestinal - hypermotility, diarrhea.

#### Skin Corrosion and Irritation:

Not applicable.

#### Serious Eye Damage and Irritation:

Not applicable.

#### **Respiratory Sensitization:**

Not applicable.

#### Skin Sensitization:

Not applicable.

### Germ Cell Mutagenicity:

Not applicable.

#### Carcinogenicity:

Not applicable.

#### **Reproductive Toxicity:**

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### **Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

#### **Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

#### **Aspiration Hazard:**

Not applicable.

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#### **Additional Toxicology Information:**

Data not available.

## **SECTION 12: Ecological Information**

#### 12.1. Ecotoxicity

Not applicable.

#### 12.2. Persistence and Degradability

Data not available.

#### 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in Soil

Data not available.

## 12.5. Other Adverse Ecological Effects

Data not available.

## **SECTION 13: Disposal Considerations**

#### 13.1. Waste Treatment Methods

Data not available.

## **SECTION 14: Transportation Information**

#### 14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.

## **SECTION 15: Regulatory Information**

#### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

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- 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals Silver Nitrate (CAS # 7761-88-8): 1 lb final RQ; 0.454 kg final RQ
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Silver Nitrate (CAS # 7761-88-8): 1.0 % de minimis concentration (listed under Chemical Category N740)
Silver Nitrate (CAS # 7761-88-8): 1.0 % de minimis concentration (reportable only when in aqueous solution, Chemical Category N511)

#### 15.5. Massachusetts Right-to-Know Substance List

Silver Nitrate (CAS # 7761-88-8): Present

#### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Water (CAS # 7732-18-5): Present Silver Nitrate (CAS # 7761-88-8): Environmental hazard

Silver Nitrate (CAS # 7761-88-8): Present

## 15.7. New Jersey Worker and Community Right-to-Know Components

Silver Nitrate (CAS # 7761-88-8): corrosive Silver Nitrate (CAS # 7761-88-8): sn 1672 Silver Nitrate (CAS # 7761-88-8): sn 3008

Silver Nitrate (CAS # 7761-88-8): SN 3008 TPQ: 500 lb (Category Code N740. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

Silver Nitrate (CAS # 7761-88-8): sn 3722

Silver Nitrate (CAS # 7761-88-8): SN 3722 TPQ: 500 lb (water dissociable, Category Code N511)

#### 15.8. California Proposition 65

Not listed.

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Water (CAS # 7732-18-5): Present Silver Nitrate (CAS # 7761-88-8): Present

#### 15.10. United States of America Toxic Substances Control Act (TSCA) List

Water (CAS # 7732-18-5): Present Silver Nitrate (CAS # 7761-88-8): Present

# 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

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## **SECTION 16: Other Information**

### 16.1. Full Text of Hazard Statements and Precautionary Statements

Suspected of damaging fertility or the unborn child.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection.

IF exposed or concerned: Get medical attention.

Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

#### 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Not Applicable.

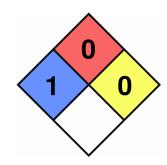
## 16.3. National Fire Protection Association (NFPA) Rating

Health: 1

Flammability: 0

Reactivity: 0

**Special Hazard:** 



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#### 16.4. Document Revision

Last Revision Date: 5/1/2015

### **DISCLAIMER**

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.

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