

HI 3898-0 Reagent

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 OSHA Regulation 29 CFR 1910.1200 Canadian Regulation SOR/88-66

Revision Date: 2012-05-25
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 3898-0 Reagent

Application: Screening Test for Determination of Chloride in

Water Samples

Company Information (USA): Hanna Instruments, Inc.

584 Park East Dr, Woonsocket, Rhode Island, USA 02895

Technical Service Contact Information: 1-800-426-6287 (8:30AM - 5:00PM ET)

+1-401-766-4260 (8:30AM - 5:00PM ET)

USA Emergency Contact Information: 1-800-424-9300 (Chemtrec 24Hr. Emergency)

International Emergency Contact Information: +1-703-527-3887 (Chemtrec 24Hr. Emergency)

E-mail Address: tech@hannainst.com

SECTION 2: HAZARD IDENTIFICATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Silver Nitrate

EC-No.: 231-853-9

CAS-No.: 7761-88-8

Hazard: C, N

Phrases: R: 34-50/53

Content: > 1% - < 2.5%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air.

After Skin Contact: Wash affected area with plenty of water. Remove contaminated clothing.

After Eye Contact: Rinse out immediately with plenty of water and seek medical advice if necessary.

After Swallowing: Drink plenty of water. Seek medical advice.

General Information: Remove contaminated, soaked clothing immediately and dispose of safely.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

Special Risks:

Ambient fire may liberate hazardous vapors. The following may develop in event of fire: Silver/Silver Oxides, Nitrogen Oxides, Oxygen

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Additional Information:

Non-combustible.



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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Do not inhale vapors. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

EXPOSURE CONTROL/PERSONAL PROTECTION

Environmental Precautions:

Take up with liquid-absorbent material.

Additional Notes:

SECTION 8:

Clean up affected area and dispose according to local regulation.

SECTION 7: HANDLING AND STORAGE

Handling: Storage:

Cannot be stored indefinitely. Stable in the recommended storage conditions.

Tightly closed. Store at room temperature (+15 to +25 $^{\circ}\text{C}$ recommended). Protect from light. Accessible only for authorized persons.

Romania

USA (OSHA)

Goggles or face mask

UK

| Туре | Value | Source | Туре | Value | Source |
|----------------|-----------------------------|-----------------|-----------|-----------------------------|------------------|
| Silver Nitrate | | | | | |
| TWA (8hr) | 0.01 mg (Ag)/m ³ | Belgium | TWA (8hr) | 0.01 mg (Ag)/m ³ | Canada (Ontario) |
| TWA (8hr) | 0.01 mg (Ag)/m ³ | Canada (Quebec) | TWA (8hr) | 0.01 mg (Ag)/m ³ | France |
| TWA (8hr) | 0.01 mg (Ag)/m ³ | Germany | TWA (8hr) | 0.01 mg (Ag)/m ³ | Greece |
| TWA (8hr) | 0.01 mg (Ag)/m ³ | Hungary | TWA (8hr) | 0.01 mg (Ag)/m ³ | Italy |
| TWA (8hr) | 0.01 mg (Ag)/m ³ | Netherlands | TWA (8hr) | 0.01 mg (Ag)/m ³ | Poland |

TWA (8hr)

TWA (8hr)

TWA (8hr)

0.01 mg (Ag)/m³

0.01 mg (Ag)/m³

0.01 mg (Ag)/m³

Engineering:

TWA (8hr)

TWA (8hr)

TWA (8hr)

Safety shower and eye wash.

Personal Protective Equipment:

As appropriate to quantity handled.

0.01 mg (Ag)/m³

0.01 mg (Ag)/m³

0.01 mg (Ag)/m³

Respiratory Protection: Protective Gloves: Eye Protection:

Required when vapors/aerosols are Rubber or plastic generated. Work under hood.

Portugal

USA (ACGIH)

Spain

Industrial Hygiene:

Wash thoroughly after handling. Remove and wash contaminated clothing promptly. Discard contaminated shoes.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Colorless liquid Odor: Odorless Density at 20°C: 1.01 g/cm3 Melting Point: NA **Boiling Point:** ~ 100°C Solubility: Soluble pH at 20°C: Flash Point: 5.2 Explosion Limit: NA NA

Thermal Decomp.: NA



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SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Strong Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

The generally known reaction partners of water

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

Quantitative data on the toxicity of this product is not available.

Potential Health Effects:

Skin Contact: Slight irritations.

Eye Contact: Slight irritations.

Ingestion: Symptoms in gastrointestinal tract.

Further Data: Further hazardous properties cannot be excluded. The product should be handled with the usual care when dealing

with chemicals.

Component Toxicity

Acute Toxicity: Chronic Toxicity:

Not Available

Silver Nitrate

LD50: Oral - Rat - 1173 mg/kg

Additional Data:

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Silver Nitrate, as the pure substance:

Remarks: behavioural: Tetany. Lungs, Thorax, or Respiration: cyanosis. Gastrointestinal: hyper motility, diarrhea.

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the toxicity of this product is not available.

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Silver Nitrate – as the pure substance:

Ecotoxicological effects

Test Type: LC50 Fish, Species: Pimephales promelas (Fathead minnow), time: 96 h: value: 40 mg/L

Test Type: EC50 Daphnia, Species: Daphnia magna, time: 48 h: value: 15 mg/L

Further Data: Do not allow to enter waters, waste waters, or soil! Harmful effects on aquatic organisms. May cause long-term adverse

effects in the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local

authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

SECTION 14: TRANSPORTATION INFORMATION

Land: Sea: Air:

Not subject to transport regulations

Not subject to transport regulations

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SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: Not applicable

R-phrases: 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases: 24/25-61: Avoid contact with skin and eyes. Avoid release to the environment.

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3 Revision Information Legend

Reason for revision:

34: Causes burns.

50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Revision Date: 2012-05-25 NA: Not Applicable ND: Not Determined

Section 14 Updated

Supersedes edition of: 2009-06-10

THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF

THE PROPERTIES OF THE PRODUCT.