

SAFETY DATA SHEET

Issue Date 16-Mar-2021 **Revision Date** 26-Jan-2024 **Version** 6.5 **Page** 1 / 16

1. IDENTIFICATION

Product identifier

Product Name Silver Nitrate Titrant 0.0493 N

Other means of identification

Product Code(s) 2349832

Safety data sheet number M00639

UN/ID no UN3082

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent. Determination of chloride.

Uses advised against

Restrictions on use None.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
Aquatic Acute Toxicity	Category 1
Chronic aquatic toxicity	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

Warning

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Hazard statements

H319 - Causes serious eye irritation

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P280 - Wear protective gloves, protective clothing, eye protection, and face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical attention

P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Isopropyl alcohol	67-63-0	1 - 5%	-
Silver nitrate	7761-88-8	<1%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed_

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Symptoms Burning sensation.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

Hazardous combustion products May emit acrid smoke and fumes.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

U.S. NoticeOnly persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside

of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product.

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Conditions for safe storage, including any incompatibilities

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

Flammability class Class IIIB

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Isopropyl alcohol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
CAS#: 67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	-
Silver nitrate	TWA: 0.01 mg/m ³ Ag	TWA: 0.01 mg/m ³	IDLH: 10 mg/m ³ Ag
CAS#: 7761-88-8		(vacated) TWA: 0.01 mg/m ³	TWA: 0.01 mg/m ³ Ag

Appropriate engineering controls

Engineering Controls

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Hand Protection

Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN

374-1:2016.

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing.

General Hygiene Considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

Local authorities should be advised if significant spillages cannot be contained. Do not allow **Environmental exposure controls**

into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Appearance aqueous solution Color colorless

Liquid

Odor Odorless Odor threshold No data available

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Remarks • Method **Property** Values

No data available Molecular weight

pН 3.5 @ 20 °C

-2 °C / 28.4 °F Melting point / freezing point Initial boiling point and boiling range 95 °C / 203 °F

Evaporation rate 1 (water = 1)

Vapor pressure 17.327 mm Hg / 2.31 kPa at 20 °C / 68 °F

Relative vapor density 0.64

Specific gravity - VALUE 1 1.00

Partition coefficient Not applicable Not applicable

Soil Organic Carbon-Water Partition

Coefficient

Autoignition temperature No data available No data available **Decomposition temperature**

Dynamic viscosity 1.3 cP (mPa s) at 20 °C / 68 °F 1.3 cSt (mm²/s) at 20 °C / 68 °F Kinematic viscosity

Solubility(ies)

Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name_	Solubility classification	Solubility	Solubility Temperature_
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Most Polar Organic Solvents	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

Steel Corrosion Rate No data available **Aluminum Corrosion Rate** No data available

Volatile Organic Compounds (VOC) Content

See ingredients information below

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Isopropyl alcohol	67-63-0	100%	Χ
Silver nitrate	7761-88-8	Not applicable	-

Explosive properties

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Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point > 94 °C / 201.2 °F

Method CC (closed cup)

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density

No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None. **Sensitivity to Static Discharge** None.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide. silver oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye contact Causes serious eye irritation. May cause redness, itching, and pain.

Skin contact May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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Symptoms

May cause redness and tearing of the eyes.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	Rat LD₅₀	4710 mg/kg	None reported	Behavioral General anesthetic	OECD 429: Skin Sensitization: Local Lymph Node Assay
Silver nitrate (<1%) CAS#: 7761-88-8	Rat LD₅o	1173 mg/kg	None reported	Behavioral Tetany Lungs, Thorax, or Respiration Cyanosis Gastrointestinal Diarrhea	RTECS

Dermal Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol (1 - 5%)	Rabbit LD ₅₀	4059 mg/kg	None reported	None reported	LOLI
CAS#: 67-63-0					

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	Rat LC50	72.6 mg/L	4 hours	Behavioral General anesthetic Lungs, Thorax, or Respiration Other changes	RTECS

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mixture

No data available.

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Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	Standard Draize Test	Rabbit	500 mg	None reported	Mild skin irritant	RTECS
Silver nitrate (<1%) CAS#: 7761-88-8	Existing human experience	Human	None reported	None reported	Corrosive to skin	NIOSH

Serious eye damage/irritation

Classification based on data available for ingredients. Irritating to eyes.

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	Standard Draize Test	Rabbit	100 mg	None reported	Corrosive to eyes	RTECS
Silver nitrate (<1%) CAS#: 7761-88-8	Existing human experience	Human	None reported	None reported	Corrosive to eyes	NIOSH

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and
				sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	None reported	Guinea pig	Not confirmed to be a skin sensitizer	OECD 429: Skin Sensitization: Local Lymph Node Assay
Silver nitrate (<1%) CAS#: 7761-88-8	Buehler Test	Guinea pig	Not confirmed to be a skin sensitizer	ECHA

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

Test data reported below.

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Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol	Human	223 mg/kg	None reported	Behavioral	RTECS
(1 - 5%)	TD_Lo			Hallucinations, Distorted	
CAS#: 67-63-0				perceptions	
				Cardiac	
				Pulse rate decrease with fall in	
				BP	
				Vascular	
				BP lowering not characterized in	
				autonomic section	

Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	Human TC∟∘	35 mg/L	4 hours	Cardiac Pulse rate decrease with fall in BP Lungs, Thorax, or Respiration Other changes	RTECS

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Silver nitrate (<1%) CAS#: 7761-88-8	Rat TD∟₀	0.7 mg/kg	14 days	Kidney, Ureter, or Bladder Interstitial nephritis Liver Hepatitis (hepatocellular necrosis), diffuse Nutritional and Gross Metabolic Weight loss or decreased weight gain	RTECS

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Silver nitrate	Rat	0.012 mg/L	119 days	Blood	RTECS
(<1%)	TCLo		-	Changes in erythrocyte (RBC)	
CAS#: 7761-88-8				count	
				Cardiac	
				Pulse rate	
				Kidney, Ureter, or Bladder	
				Urine volume increased	

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Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol	67-63-0	-	Group 3	-	X
Silver nitrate	7761-88-8	-	Group 2A	-	Χ

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 2A - Probably Carcinogenic to
	Humans
	Group 3 - Not classifiable as a human
	carcinogen
NTP (National Toxicology Program)	Does not apply
OSHA	X - Present

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data

No data available.

Substance invitro Data

No data available.

Mixture invivo Data

No data available.

Substance invivo Data

Test data reported below.

Inhalation (Dust/Mist) Exposure Route

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	Cytogenetic analysis	Rat	0.00103 mg/L	16 weeks	Positive test result for mutagenicity	RTECS

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol	Rat	32.4 mg/kg	None reported	Effects on Embryo or Fetus	RTECS

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(1 - 5%)	TD∟₀			Fetal death	
CAS#: 67-63-0					
Silver nitrate	Rat	28560 mg/kg	17 weeks	Paternal Effects	RTECS
(<1%)	TD_Lo			Spermatogenesis (including	
CAS#: 7761-88-8				genetic material, sperm	
				morphology, motility, and count)	

Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Isopropyl alcohol	Rat	7000 mg/L	19 days	Specific Developmental	RTECS
(1 - 5%)	TCLo			Abnormalities	
CAS#: 67-63-0				Musculoskeletal system	

Aspiration hazard

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Mixture

Aquatic Acute Toxicity No data available.

Aquatic Chronic Toxicity

No data available.

Substance

Aquatic Acute Toxicity

Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	96 hours	Pimephales promelas	LC50	4200 mg/L	IUCLID
Silver nitrate (<1%) CAS#: 7761-88-8	96 hours	Oncorhynchus mykiss	LC50	0.006 mg/L	PEEN

Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	48 Hours	None reported	LC50	1400 mg/L	IUCLID
Silver nitrate (<1%) CAS#: 7761-88-8	48 Hours	Daphnia magna	LC50	0.00156 mg/L	PEEN

Algae

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Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Isopropyl alcohol (1 - 5%) CAS#: 67-63-0	72 Hours	Scenedesmus subspicatus	EC50	> 1000 mg/L	IUCLID
Silver nitrate (<1%) CAS#: 7761-88-8	96 hours	Scenedesmus dimorphus	EC50	0.0093 mg/L	PEEN

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Mixture

No data available.

Mixture

No data available.

Partition coefficient Not applicable

Mobility

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Special instructions for disposal

Dispose of material in an E.P.A. approved hazardous waste facility. Check with local municipal and state authorities and waste contractors for pertinent local information

regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

DOT

UN/ID no UN3082

Proper shipping name Environmentally hazardous substances, liquid, n.o.s.

DOT Technical Name Silver nitrate

Transport hazard class(es)

9 Ш **Packing Group**

Emergency Response Guide

Number

171

TDG

UN/ID no

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

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TDG Technical Name Silver nitrate

Transport hazard class(es) Ш **Packing Group**

IATA

UN number or ID number UN3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Silver nitrate **IATA Technical Name**

Transport hazard class(es) Packing group Ш **ERG Code** 9L

A97, A158 **Special Provisions**

IMDG

UN number or ID number UN3082

Environmentally hazardous substance, liquid, n.o.s. Proper shipping name

IMDG Technical Name Silver nitrate

Transport hazard class(es) **Packing Group** Ш EmS-No F-A, S-F **Special Provisions** 274, 335

Marine pollutant This material meets the definition of a marine pollutant

No special precautions necessary. Note:

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

Complies **TSCA DSL/NDSL** Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS Complies Complies **ENCS IECSC** Complies Complies **KECL** Complies **PICCS** Complies TCSI **AICS** Complies Complies **NZIoC**

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

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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	SARA 313 - Threshold Values %
Isopropyl alcohol (CAS #: 67-63-0)	1.0
Silver nitrate (CAS #: 7761-88-8)	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Silver nitrate	1 lb	X	-	X
7761-88-8				

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Silver nitrate	1 lb	-	RQ 1 lb final RQ
7761-88-8			RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Isopropyl alcohol	X	X	X
67-63-0			
Silver nitrate	X	X	X
7761-88-8			

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Isopropyl alcohol	180.0950	-

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

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Additional information

Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Silver nitrate 7761-88-8	Declarable Substance (LR)	None reported

NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 1	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 2	Flammability - 1	Physical hazards - 0	Personal protection -
		-	_	X
				- I

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH (American Conference of Governmental Industrial Hygienists)

ATSDR ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

CEPA CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERISINERIS (The National Industrial Environment and Risks Institute)IPCS INCHEMIPCS INCHEM (International Programme on Chemical Safety)IUCLIDIUCLID (The International Uniform Chemical Information Database)NITEJapan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

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binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

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Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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End of Safety Data Sheet

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