

SAFETY DATA SHEET

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Version 1.01

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name: KODAK Hypo Test Kit
X-OMAT Hypo Test Kit

Product code: 1965847

Supplier Carestream Health, Inc., 150 Verona Street, Rochester, New York 14608

For Emergency Health Information call: 800-424-9300

For other information contact: 800-328-2910

Synonyms PCD 3756

Product Use: Restricted to professional users. Film Testing Solution.

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Corrosive to metals	Category 1

Label Elements

Emergency Overview

Signal Word

DANGER

Hazard statements

Causes serious eye damage
Causes skin irritation
May cause respiratory irritation
May be corrosive to metals



Appearance Colorless Liquid

Physical state liquid

Odor Vinegar-like

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep only in original container

Precautionary Statement - Response

Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Spill

Absorb spillage to prevent material damage

Precautionary Statement - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up
Store in corrosive resistant container with a resistant inliner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

- not applicable

Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS**Synonyms**

PCD 3756.

Chemical Name	CAS-No	Weight %	Trade Secret
Water 7732-18-5	7732-18-5	>95	*
Acetic acid 64-19-7	64-19-7	1-5	*
Silver nitrate 7761-88-8	7761-88-8	0.25-1	*

*The exact percentages (concentrations) have been withheld as trade secrets.

4. FIRST AID MEASURES**First Aid Measures****Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Seek immediate medical attention/advice.

Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms and effects, both acute and delayed

Main Symptoms Irritation. Difficulty breathing. Coughing and/ or wheezing.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Do not touch or walk through spilled material.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

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 Contain the spill. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store in corrosive resistant container with a resistant inliner.

Incompatible products None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs	OSHA PEL	Advisory OEL
Acetic acid 64-19-7	STEL 15 ppm TWA: 10 ppm		TWA: 10 ppm TWA: 25 mg/m ³	
Silver nitrate 7761-88-8	TWA: 0.01 mg/m ³		TWA: 0.01 mg/m ³	

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles

Skin and body protection Long sleeved clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid	Odor	Vinegar-like
Appearance	Colorless Liquid	Odor Threshold	No information available
Color	colorless		
Property	Values	Remarks/ • Method	
ph	2.4	No information available	
Melting point/range:		No information available	
Boiling point/boiling range	> 100 °C	No information available	
Flash Point	> 93.4 °C	No information available.	
Evaporation rate		No information available	
Flammability (solid, gas)			
upper flammability limit			
lower flammability limit			

Vapor pressure	24 mbar @ 20 °C	No information available
Vapor density	0.6	No information available
Specific Gravity		No information available
Water Solubility	completely soluble	No information available
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties	No information available	
Oxidizing Properties	No information available	

Other information

Softening point	No information available
Density VALUE	No information available
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY

Reactivity

not applicable

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Heat.

Incompatible Materials

None known.

Hazardous Decomposition Products

None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Irritating to respiratory system.
Eye contact	Irritating to eyes. Risk of serious damage to eyes.
Skin contact	Irritating to skin.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Toxicology data for the components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Water 7732-18-5	90,000 mg/kg (Rat)		
Acetic acid 64-19-7	3310 mg/kg (Rat)	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 4 h
Silver nitrate 7761-88-8	1173 mg/kg (Rat)		

Chemical Name	Other applicable information
Acetic acid	Severe eye irritation Severe skin irritation Acute overexposure to extremely high airborne concentrations of respiratory irritants has been associated with development of an asthma-like reactive airways syndrome (RADS) in susceptible individuals. Extremely high airborne concentrations are not generated during normal conditions of use but may occur following a spill. The potential to generate extremely high airborne concentrations in a spill situation depends upon physical factors such as the concentration of the solution, the volume of the spill, the surface area of the spill, the size of the room where the spill occurred, and the ventilation rate in the room.

Information on toxicological effects

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
mutagenic effects No information available.
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): Silver nitrate. The IARC classification only applies to ingested nitrites and nitrate which is not a likely route of exposure in the occupational environment.

Chemical Name	ACGIH	IARC	NTP	OSHA
Silver nitrate 7761-88-8		2A		X

IARC: (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Effects expected to be similar to those seen acutely.
Target Organ Effects Skin, Eyes, Respiratory system.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

mg/kg mg/L

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
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Acetic acid 64-19-7		LC50= 79 mg/L Pimephales promelas 96 h LC50= 75 mg/L Lepomis macrochirus 96 h		EC50 = 47 mg/L 24 h (Daphnia magna) EC50 = 65 mg/L 48 h (Daphnia magna)
Silver nitrate 7761-88-8		LC50 0.00512 - 0.00787 mg/L Poecilia reticulata 96 h LC50 0.009 - 0.02 mg/L Lepomis macrochirus 96 h LC50 0.0242 - 0.0484 mg/L Lepomis macrochirus 96 h LC50 0.05 - 0.07 mg/L Lepomis macrochirus 96 h LC50 0.001339 - 0.001637 mg/L Oncorhynchus mykiss 96 h LC50= 0.0075 mg/L Oncorhynchus mykiss 96 h LC50 0.00839 - 0.1802 mg/L Oncorhynchus mykiss 96 h LC50 0.00452 - 0.00638 mg/L Pimephales promelas 96 h LC50 0.00181 - 0.00214 mg/L Pimephales promelas 96 h LC50 0.0064 - 0.0106 mg/L Pimephales promelas 96 h LC50= 0.009 mg/L Pimephales promelas 96 h LC50= 0.0027 mg/L Cyprinus carpio 96 h		EC50 = 0.0006 mg/L 48 h (Daphnia magna) EC50 0.0008 - 0.001 mg/L 48 h (Daphnia magna) EC50 0.0008 - 0.0011 mg/L 48 h (Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation:

No information available.

Chemical Name	log Pow
Acetic acid 64-19-7	-0.31

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Waste Disposal Methods**

Should not be released into the environment. Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers. Dispose of in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Acetic acid 64-19-7	Toxic Corrosive Ignitable
Silver nitrate 7761-88-8	Toxic

14. TRANSPORT INFORMATION

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

DOT

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquids, n.o.s.
Technical Name	Acetic acid, Silver nitrate
Hazard class	8
Packing Group	III
Special Provisions	IB3, T7, TP1, TP28
Emergency Response Guide Number	154

TDG

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Technical Name	Acetic acid, Silver nitrate
Hazard class	8
Packing Group	III

ICAO/IATA

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Technical Name	Acetic acid, Silver nitrate
Hazard class	8
Packing Group	III
ERG Code	8L
Special Provisions	A3, A803

IMDG/IMO

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Technical Name	Acetic acid, Silver nitrate
Hazard class	8
Packing Group	III
EmS No.	F-A, S-B
Special Provisions	274

This product meets the requirements of the limited quantity exemption. The shipping case will be marked as a limited quantity. It does not require other labeling or placarding except if transported by aircraft. For transportation information, go to: <http://ship.carestreamhealth.com>.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

NZIoC Complies

Legend

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

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

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

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

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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 %
Silver nitrate - 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

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):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic acid	5000 lb			X
Silver nitrate	1 lb	X		X

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

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical Name	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acetic acid - 64-19-7		Group II		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA Product RQ
Acetic acid	5000 lb		
Silver nitrate	1 lb		

TSCA

This product does not contain any chemicals regulated under TSCA Section 4, Section 5(a), Section 8(a) or Section 8(d).

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acetic acid	X	X	X		X
Silver nitrate	X	X	X	X	X

International Regulations**Mexico - Grade** Moderate risk, Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
Acetic acid		Mexico: TWA 10 ppm Mexico: TWA 25 mg/m ³ Mexico: STEL 15 ppm Mexico: STEL 37 mg/m ³
Silver nitrate		Mexico: TWA 0.01 mg/m ³

16. OTHER INFORMATION**NFPA**
HMIS**Health Hazard** 2
Health Hazard 2**Flammability** 1
Flammability 1**Instability** 0
Physical Hazard 0**Revision Date**

2013-03-07

Revision Note

Update to OSHA GHS SDS format

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Material Safety Data Sheet