

Chlorine Spot Test Solution

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).
Date of Issue: 01/18/2023 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Chlorine Spot Test Solution

Product Code: 409921SS

1.2. Intended Use of the Product

Laboratory chemicals

1.3. Name, Address, and Telephone of the Responsible Party

Company

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291

tech@aquaphoenixsci.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS

(800)255-3924 (North America)

+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Serious eye damage/eye irritation Category 2A

H319

2.2. Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA)

: Warning

Hazard Statements (GHS-US/CA)

: H319 - Causes serious eye irritation.

Precautionary Statements (GHS-US/CA)

: P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 - Wear protective gloves, protective clothing, and eye 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 advice/attention.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Reactions with strong acids may result in evolution of toxic gases or vapors.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Water	water / AQUA	(CAS-No.) 7732-18-5	52.991	Not classified
Ammonium bromide	Ammonium bromide ((NH4)Br)	(CAS-No.) 12124-97-9	47	Eye Irrit. 2A, H319
C.I. Acid Yellow 73	Sodium fluorescein / Acid Yellow 73 / 9-	(CAS-No.) 518-47-8	0.007	Not classified

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	<p>o-Carboxyphenyl-6-hydroxy-3-isoxanthone, disodium salt / Disodium 2-(3-oxo-6-oxidoxanthen-9-yl)benzoate / Fluorescein sodium / Fluorescein, disodium salt / Fluorescein, sodium / Sodium salt of hydroxy-o-carboxyphenyl-fluorone / Spiro(isobenzofuran-1(3H),9'-(9H)xanthen)-3-one, 3',6'-dihydroxy-, disodium salt / Uranine Yellow / C.I. 45350 / Spiro[isobenzofuran-1(3H),9'-(9H)xanthen]-3-one, 3',6'-dihydroxy-, disodium salt / Spiro[isobenzofuran-1(3H),9'-(9H)xanthen]-3-one, 3',6'-dihydroxy-, sodium salt (1:2) / ACID YELLOW 73 SODIUM SALT / Fluorescein, disodium / D and C Yellow No. 8 / Uranine A / 2-(6-Hydroxy-3-oxo-(3H)-xanthen-9-yl)benzoic acid disodium salt / Fluorescein sodium salt / Organic dye Uranine A / C.I. 45350:1 sodium salt / Disodium 3-oxo-3H-spiro[isobenzofuran-1,9'-xanthene]-3',6'-diolate / C.I. 45350 sodium / ACID YELLOW 73 / CI 45350 / fluorescein sodium / Acid Yellow 73 sodium salt</p>			
Sodium azide	Sodium azide (Na(N3)) / Sodium azide (NaN3) / sodium azide	(CAS-No.) 26628-22-8	0.002	<p>Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust</p>

Full text of H-statements: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

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SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Does not burn. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Reacts with acids to form hydrogen bromide. Reacts with bases to form ammonia.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Bromine compounds. Nitrogen oxides. Sodium oxides. Carbon oxides (CO, CO₂). Hydrogen bromide. Ammonia.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Practice good housekeeping - spillage can be slippery on smooth surfaces.

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist, spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Bromine trifluoride. Potassium. Heavy metal salts.

7.3. Specific End Use(s)

Laboratory chemicals

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

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For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Sodium azide (26628-22-8)		
USA ACGIH	ACGIH OEL Ceiling	0.29 mg/m ³
USA ACGIH	ACGIH OEL Ceiling [ppm]	0.11 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (Ceiling)	0.3 mg/m ³
USA NIOSH	NIOSH REL C [ppm]	0.1 ppm
Alberta	OEL C	0.29 mg/m ³
Alberta	OEL Ceiling [ppm]	0.11 ppm
Alberta	OEL STEL	0.3 mg/m ³
British Columbia	OEL C	0.29 mg/m ³
British Columbia	OEL Ceiling [ppm]	0.11 ppm
Manitoba	OEL C	0.29 mg/m ³
Manitoba	OEL Ceiling [ppm]	0.11 ppm
New Brunswick	OEL C	0.29 mg/m ³
New Brunswick	OEL Ceiling [ppm]	0.11 ppm (vapor)
Newfoundland & Labrador	OEL C	0.29 mg/m ³
Newfoundland & Labrador	OEL Ceiling [ppm]	0.11 ppm
Nova Scotia	OEL C	0.29 mg/m ³
Nova Scotia	OEL Ceiling [ppm]	0.11 ppm
Nunavut	OEL C	0.29 mg/m ³
Nunavut	OEL Ceiling [ppm]	0.11 ppm
Northwest Territories	OEL C	0.29 mg/m ³
Northwest Territories	OEL Ceiling [ppm]	0.11 ppm
Ontario	OEL C	0.29 mg/m ³
Ontario	OEL Ceiling [ppm]	0.11 ppm
Prince Edward Island	OEL C	0.29 mg/m ³
Prince Edward Island	OEL Ceiling [ppm]	0.11 ppm
Québec	Plafond (OEL Ceiling)	0.29 mg/m ³
Québec	Plafond (OEL Ceiling) [ppm]	0.11 ppm (vapour)
Saskatchewan	OEL C	0.29 mg/m ³
Saskatchewan	OEL Ceiling [ppm]	0.11 ppm
Yukon	OEL C	0.3 mg/m ³
Yukon	OEL Ceiling [ppm]	0.1 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

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Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Yellow
Odor	: None
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: No data available
Upper Flammable Limit	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Specific Gravity	: No data available
Solubility	: Water: Soluble
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Reacts with acids to form hydrogen bromide. Reacts with bases to form ammonia.

10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers. Bromine trifluoride. Potassium. Heavy metal salts.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Bromine compounds. Nitrogen oxides. Sodium oxides. Carbon oxides (CO, CO₂). Hydrogen bromide. Ammonia.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

No additional information available

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

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Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ammonium bromide (12124-97-9)	
LD50 Oral Rat	2700 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 0.1 mg/l/4h (No mortalities)
C.I. Acid Yellow 73 (518-47-8)	
LD50 Oral Rat	6721 mg/kg
Sodium azide (26628-22-8)	
LD50 Oral Rat	27 mg/kg
LD50 Dermal Rabbit	20 mg/kg
LC50 Inhalation Rat	0.054 – 0.52 mg/l/4h (Dust/Mist - mg/l/4h)

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Sodium azide (26628-22-8)	
LC50 Fish 1	0.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 Fish 2	0.7 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 algae	0.348 mg/l

12.2. Persistence and Degradability

Chlorine Spot Test Solution	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Chlorine Spot Test Solution	
Bioaccumulative Potential	Not established.

C.I. Acid Yellow 73 (518-47-8)	
Partition coefficient n-octanol/water (Log Pow)	2.16 (at pH 5.5)

12.4. Mobility in Soil

Leaches into groundwater

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Not regulated for transport

14.2. In Accordance with IMDG

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Not regulated for transport

14.3. In Accordance with IATA

Not regulated for transport

14.4. In Accordance with TDG

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Chlorine Spot Test Solution	
SARA Section 311/312 Hazard Classes	Health hazard - Serious eye damage or eye irritation
Ammonium bromide (12124-97-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
C.I. Acid Yellow 73 (518-47-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Sodium azide (26628-22-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Listed on the United States SARA Section 302	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (this material is a reactive solid, the TPQ does not default to 10000 pounds for non-powder, non-molten, non-solution form)
SARA Section 313 - Emission Reporting	1 %
Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
Aqueous ammonia from water dissociable ammonium salts and other sources	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 % (10% of total aqueous Ammonia is reportable under this listing)

15.2. US State Regulations

Ammonium bromide (12124-97-9)	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Massachusetts - Right To Know List	
Sodium azide (26628-22-8)	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Massachusetts - Right To Know List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	

15.3. Canadian Regulations

Ammonium bromide (12124-97-9)	
Listed on the Canadian DSL (Domestic Substances List)	
C.I. Acid Yellow 73 (518-47-8)	
Listed on the Canadian DSL (Domestic Substances List)	
Sodium azide (26628-22-8)	
Listed on the Canadian DSL (Domestic Substances List)	
Water (7732-18-5)	
Listed on the Canadian DSL (Domestic Substances List)	

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 01/18/2023

Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

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GHS Full Text Phrases:

H300	Fatal if swallowed
H310	Fatal in contact with skin
H319	Causes serious eye irritation
H330	Fatal if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

NA GHS SDS 2015 (Can, US)