

Kit #110R Families of Elements Experiment

1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Silver Nitrate Solution
Alternative names: Silver nitrate water solution, 0.02M.
Product Number: 110R-5EA, A110R-5, C110R-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Acute Aquatic Toxicity (Category 2), H401
Chronic Aquatic Toxicity (Category 2), H411



Pictogram:

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: H401– Toxic to aquatic life, H411-Toxic to aquatic life with long lasting effects.
Precautionary statements: P273—Avoid release to the environment, P264 - Wash exposed skin thoroughly after handling, P280 - Wear protective gloves, eye protection.

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	99.66%	Not classified
Silver nitrate	CAS# 7761-88-8	0.34%	Ox. Sol. 2, H272; Acute Tox. 4 (Oral), H302; Skin Corr. 1B H314; Eye Dam. 1, H318; Acute Aquatic 1, H400; Acute Chronic 1, H410, STOT RE 1, H372

3.3 Chemicals where a trade secret is claimed: None

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not applicable.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in an appropriate container. Ventilate and wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing vapor. Use with adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: STEL: 0.01mg/m³

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Appearance: Colorless, Clear.

Odor: Not available

pH: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: N/A

Flash point: N/A

Autoignition: N/A

Boiling point: ≈100°C

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Not available

Specific gravity (H₂O = 1): ≈1 at 20°C

Percent volatile (%): 100%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials.

Incompatibilities: Slightly reactive to reactive with reducing agents, combustible materials, organic materials, alkalis.

Hazardous decomposition: Not available

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Causes eye irritation. May cause conjunctivitis. Skin: Causes skin irritation. May cause dermatitis. May cause blackening of the skin. Inhalation: Can cause irritation of the respiratory tract and mucous membranes as mist. Ingestion: Can cause digestive/ gastrointestinal tract irritation. Symptoms may include irritation of the mouth, abdominal pain, blackening of the mucous membrane, vomiting. May affect kidneys (lesions of the kidneys, anuria), lungs (lesions of lungs). Other symptoms of acute silver poisoning may include shock, dizziness, vertigo, coma, convulsions, fall in blood pressure, decreased respiration, cyanosis. Chronic ingestion of low concentrations of silver nitrate can change the color of the skin, nails, body organs to bluish-grayish.

Toxicological data:

ORL LD₅₀: 1173mg/kg as silver nitrate [Rat]: 473mg/kg [Guinea pig]: 50mg/kg [mouse]

IHL-RAT LD₅₀: Not available

SKN-RABBIT LD₅₀: Not available

Carcinogenicity: California prop 65: Not classified

12. ECOLOGICAL INFORMATION

LC50 Oncorhynchus mykiss(rainbow trout) 96 hours: 0.006 mg/l. LC50 Leuciscus idus(Golden orfe) 96 hours: 0.029 mg/l. EC50 Daphnia magna (Water flea) 48 hours: 0.0006 mg/l.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: N/A

Hazard Class: N/A

Packing group: N/A

Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-853-9) silver nitrate. DSC (EEC) R36/38-Irritating to eyes and skin. WHMIS (Canada) CLASS D-2B: Material causing other toxic effects (TOXIC).

16. OTHER INFORMATION

Disclaimer:

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Potassium Iodide Solution
Alternative names: Potassium iodide water solution.
Product Number: 110R-3EA, A110R-3, C110R-3. 85-3EA, C85-3.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only.

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA.
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: Not classified
Precautionary statements: Not classified

Pictogram: Not classified

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	99-99.9%	Not classified
Potassium iodide	CAS# 7681-11-0	0.1-1%	Acute Tox. 4, H302; Skin Irrit. 2 H315 ; Eye Irrit. 2A, H319.

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not applicable.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in a sealed bag or container. For small spill use paper towel and place in trash. Ventilate and wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling:

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA 0.01mg/m³ as potassium iodide.

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Appearance: Transparent, Colorless, Clear.

Odor: No odor

pH: Not available

Vapor Pressure (mm Hg): 2.3kPa at 20 °C

Vapor Density: 0.63 (Air=1)

Evaporation Rate: not available

Viscosity: not available

Flash point: Not available

Autoignition: Not available

Boiling point: 212°F/100°C

Melting point: ~0 °C/32 °F

Freezing point: 0 °C/32 °F

Decomposition temp: not available

Solubility: Miscible.

Specific gravity (H₂O = 1): 1.00 at 20°C

Percent volatile (%): >99 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: High temperatures, and incompatible materials.

Incompatibilities: Oxidizing agents, reducing agents, organic materials, metals, acids.

Hazardous decomposition: Hydrogen iodide, iodine, oxides of potassium.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: No data available. Skin: No data available. Inhalation: No data available Ingestion: No data available.

Toxicological data

Acute oral toxicity ORAL LD₅₀: 1000mg/kg [Mouse] as potassium iodide.

Acute dermal toxicity LD₅₀ not available.

Acute vapor toxicity LC₅₀: not available

Carcinogenicity: California prop 65: Not classified

12. ECOLOGICAL INFORMATION

Ecotoxicity in water (LC₅₀): 2190mg/l 96 hrs. Oncorhynchus mykiss (rainbow trout).

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: N/A

Hazard Class: N/A

Packing group: N/A

Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA 8(b) listed.

16. OTHER INFORMATION

Disclaimer:

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Potassium Chloride Solution
Alternative names: Potassium chloride water solution.
Product Number: 110R-1EA, A110R-1, C110R-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: Not classified
Precautionary statements: Not classified

Pictogram: Not classified

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	99-99.9%	Not classified
Potassium chloride	CAS#7447-40-7	0.1-1%	Not classified

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not available.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Mop up the area.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: Not classified

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Appearance: Clear.

Odor: Not available

pH: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: N/A

Flash point: N/A

Autoignition: N/A

Boiling point: 212°F/100°C

Melting point: ~0 °C/32 °F

Freezing point: 0 °C/32 °F

Decomposition temp: not available

Solubility: Miscible.

Specific gravity (H₂O = 1): 1.00 at 20°C

Percent volatile (%): >99 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Not available.

Incompatibilities: Not available

Hazardous decomposition: Not available.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: No information available. Skin: No information available. Inhalation: No information available. Ingestion: No information available.

Toxicological data

Acute oral toxicity ORAL LD₅₀: 2600mg/kg [Rat] as potassium chloride

Acute vapor toxicity IHL-LC₅₀: Not available

DERMAL LD₅₀: Not available

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

LC50 Lepomis microchirus 96 hours: 1060 mg/l. LC50 Pimephales promelas 96 hours: 750-1020 mg/l. EC50 Daphnia magna (Water flea) 48 hours: 825mg/l.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: N/A

Hazard Class: N/A

Packing group: N/A

Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed.

16. OTHER INFORMATION

Disclaimer:

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Potassium Bromide Solution
Alternative names: Potassium bromide water solution.
Product Number: 110R-2EA, A110R-2, C110R-2.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only.

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA.
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: Not classified
Precautionary statements: Not classified

Pictogram: Not classified

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	99-99.9%	Not classified
Potassium bromide	CAS# 7758-02-3	0.1-1%	Skin Irrit. 2 H315 ; Eye Irrit. 2A, H319. STOT SE 3, H335

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not applicable.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in a sealed bag or container. For small spill use paper towel and place in trash. Ventilate and wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling:

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: Not available.

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Appearance: Transparent, Colorless, Clear.

Odor: No odor

pH: ~7

Vapor Pressure (mm Hg): 2.3kPa at 20 °C

Vapor Density: 0.63 (Air=1)

Evaporation Rate: not available

Viscosity: not available

Flash point: Not available

Autoignition: Not available

Boiling point: 212°F/100°C

Melting point: ~0 °C/32 °F

Freezing point: 0 °C/32 °F

Decomposition temp: not available

Solubility: Miscible.

Specific gravity (H₂O = 1): 1.00 at 20°C

Percent volatile (%): >99 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Not available.

Incompatibilities: Not available

Hazardous decomposition: Not available.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: No data available. Skin: No data available. Inhalation: No data available Ingestion: No data available.

Toxicological data

Acute oral toxicity ORAL LD₅₀: 3070mg/kg Rat] as potassium bromide.

Acute dermal toxicity LD₅₀ not available.

Acute vapor toxicity LC₅₀: not available

Carcinogenicity: California prop 65: Not classified

12. ECOLOGICAL INFORMATION

Ecotoxicity in water (LC₅₀): 30mg/l 96 hrs. Pimephales promelas. EC₅₀: 30mg/l 96 hrs. Daphnia magna.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: N/A

Hazard Class: N/A

Packing group: N/A

Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA 8(b) listed.

16. OTHER INFORMATION

Disclaimer:

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Potassium Sulfide Solution
Alternative names: Potassium sulfide water solution.
Product Number: 110R-4EA, A110R-4, C110R-4.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory and educational use only.

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA.
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified
Hazards statements: Not classified
Precautionary statements: Not classified

Pictogram: Not classified

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	99-99.9%	Not classified
Potash sulfurated	CAS# 39365-88-3	0.1-1%	Skin Corr. 1 H314 ; Eye Dam.1, H318. STOT SE 3, H335

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not applicable.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in a sealed bag or container. For small spill use paper towel and place in trash. Ventilate and wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling:

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing vapor. Use hood or with adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: Not available.

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Appearance: Colorless to yellow.

Odor: Rotten egg (slight)

pH: Not available

Vapor Pressure (mm Hg): 2.3kPa at 20 °C

Vapor Density: 0.63 (Air=1)

Evaporation Rate: not available

Viscosity: not available

Flash point: Not available

Autoignition: Not available

Boiling point: 212°F/100°C

Melting point: ~0 °C/32 °F

Freezing point: 0 °C/32 °F

Decomposition temp: not available

Solubility: Miscible.

Specific gravity (H₂O = 1): 1.00 at 20°C

Percent volatile (%): >99 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Not available.

Incompatibilities: Metals, acids.

Hazardous decomposition: Liberates toxic hydrogen sulfide on contact with acids.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: No data available. Skin: No data available. Inhalation: No data available Ingestion: No data available.

Toxicological data

Acute oral toxicity ORAL LD₅₀: Not available.

Acute dermal toxicity LD₅₀ not available.

Acute vapor toxicity LC₅₀: not available

Carcinogenicity: California prop 65: Not classified

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A

Shipping name: N/A

Hazard Class: N/A

Packing group: N/A

Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed: water, Potash sulfured is not listed. However components potassium thiosulfate and potassium trisulfide are listed.

16. OTHER INFORMATION

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