

9624.

SA 08241
SA 08532

Kit #111 Flame Tests and Emission Spectroscopy

1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Sodium Chloride Solution
Alternative names: Sodium chloride water solution.
Product Number: 111-5EA, A111-5, C111-5

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

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

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	75-90%	Not classified
Sodium chloride	CAS# 7647-14-5	10-25%	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 medical attention if necessary.

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 necessary.

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. 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: 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: Not available

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Not available

Specific gravity (H₂O = 1): Not available

Percent volatile (%): 100%

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: It may cause sodium poisoning if large quantities are ingested.

Toxicological data

ORL-RAT LD₅₀: 3000mg/kg as sodium chloride

IHL-RAT LD₅₀: >42000mg/kg 1hr as sodium chloride

SKN-RABIT LD₅₀: >10000mg/kg as sodium chloride

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

Not 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, EINECS-listed (231-598-3) sodium chloride

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: Barium Chloride Solution
Alternative names: Barium chloride water solution.
Product Number: 111-1EA, A111-1, C111-1.

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

Oral Tox. (Category 3) H301
Acute Aquatic Toxicity (Category 3), H402,
Chronic Aquatic Toxicity (Category 3), H412

2.2 Label elements, including precautionary statements

Signal word: Danger
Hazards statements: H301 - Toxic if swallowed. H402 - Harmful to aquatic life, H412 - Harmful 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. P301+P312+P330-IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.



Pictogram:

2.3 Hazards not otherwise classified: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: N/A

3.2 Mixture: Yes

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	75-90%	Not classified
Barium Chloride	CAS# 10361-37-2	10-25%	Acute Tox. 3, H301; Acute Tox. 4, H332, Aquatic Tox. 3, H402; Aquatic Chronic 3, H412

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. Get medical attention if necessary.

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

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: Not flammable

Suitable extinguishing media: Use extinguishing methods for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Emits barium oxides and hydrogen chloride gas when heated to decomposition.

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. For small spills use paper towel. 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. Keep It tightly closed.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA 0.5 mg/m³ as barium chloride

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: None 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: Not available.

Flash point: Not available

Autoignition: Not available

Boiling point: Not available

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Miscible in water

Specific gravity (H₂O = 1): Not available

Percent volatile (%): Not available

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials.

Incompatibilities: Reactive with oxidizing agents and acids.

Hazardous decomposition: Barium oxides and hydrogen chloride gas.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: May cause eye irritation. Skin: May cause skin irritation. Inhalation: Not expected to cause adverse effects under normal handling procedures. Ingestion: Toxic if swallowed. Ingestion may cause gastrointestinal irritation with nausea, vomiting, diarrhea.

Toxicological data:

ORL-LD₅₀: 118mg/kg [Rat], 76mg/kg [Guinea pig], 150mg/kg [Mouse]

IHL-RAT LD₅₀: Not available

SKN-RABIT LD₅₀: Not available

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

EC50 [(Daphnia magna (Water flea)) 48 hours: 14.5 mg/l: barium chloride.

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: 1564

Shipping name: Barium Compound, n.o.s. (Barium chloride liquid)

Hazard Class: 6.1

Packing group: III

Exceptions: Lt qty. 4L

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (233-788-1) as barium chloride. WHMIS (Canada): CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). DSCL (EEC). R25- Toxic if swallowed.

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, Inc. 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: Calcium Chloride Solution
Alternative names: Calcium chloride water solution.
Product Number: 111-2EA, A111-2, C111-2

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

Acute Tox. Oral (Category 4), H302
Acute Tox. Skin (Category 5), H313
Eye Irrit. (Category 2A), H319



2.2 Label elements, including precautionary statements

Signal word: Warning
Hazard statements: H302-Harmful if swallowed, H319- Causes serious eye irritation. H313-May be harmful in contact with skin.
Precautionary statements: P264 - Wash 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: N/A

3.2 Mixture:

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	75-90%	Not classified
Calcium chloride	CAS# 10035-04-8	10-25%	Eye Irrit. 2A, H319; Acute Tox. 4, H302; Acute Tox. 5, H313

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 immediate medical attention.

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

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: Not flammable

Suitable extinguishing media: Use extinguishing methods for surrounding fires.

5.2 Special hazard arising from the substance or mixture: When heated to decomposition, emits toxic fumes of chlorine gases.

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 spill. 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. Keep It tightly closed.

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: None 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): Not available

Vapor Density: Not available

Evaporation Rate: not available

Viscosity: not available

Flash point: Not available

Autoignition: Not available

Boiling point: 1670°C/3038°F (Calcium chloride)

Melting point: 772°C/1421.6 °F (Calcium chloride)

Freezing point: 0 °C/32 °F (water)

Decomposition temp: Not available

Solubility: Miscible.

Specific gravity (H₂O = 1): Not available

Percent volatile (%): 100 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Excessive temperatures, and incompatible materials.

Incompatibilities: Acids, Metals will slowly corrode in aqueous solution.

Hazardous decomposition: When heated to decomposition, emits toxic fumes of chlorine gases.

Hazardous polymerization: Not available.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Causes serious eye irritations. Skin: May cause mild skin irritation. Inhalation: Not expected to cause adverse effects. Ingestion: Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Toxicological data:

Acute oral toxicity ORAL LD₅₀: 1000mg/kg [Rat]

Acute vapor toxicity IHL-LC₅₀: Not available

Acute dermal toxicity LD₅₀: 2630mg/kg [Rat]

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

LC₅₀ [Fathead minnow (Pimephales romelas)] 3930-5360mg/L 96h. [Water flea (Daphnia magna)] 759mg/L 72h.

Calcium chloride does not bioaccumulate.

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: Not available

Shipping name: Not controlled.

Hazard Class: N/A

Packing group: N/A

Exceptions: N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (233-140-8), WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC). EU classification: It is classified as irritant. R36-Irritating to eyes.

16. OTHER INFORMATION

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1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Lithium Chloride Solution
Alternative names: Lithium chloride water solution.
Product Number: 111-3EA, A111-3, C111-3

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

Acute Tox. Oral (Category 4), H302
Eye Irrit. (Category 2A), H319
Skin Irrit. (Category 2), H315

2.2 Label elements, including precautionary statements

Signal word: Warning
Hazards statements: H302-Harmful if swallowed, H319-- Causes serious eye irritation. H315-Causes skin Irritation.
Precautionary statements: P264 - Wash skin thoroughly after handling, P280 - Wear protective gloves, eye protection,
P301+P312+P330-IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Pictogram:



2.3 Hazards not otherwise classified: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: N/A

3.2 Mixture:

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	75-90%	Not classified
Lithium chloride	CAS# 7447-41-8	10-25%	Eye Irrit. 2A, H319; Skin Irrit. 2, H315; Acute Tox. 4, H302

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 immediate medical attention.

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

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: Not flammable

Suitable extinguishing media: Use extinguishing methods for surrounding fires.

5.2 Special hazard arising from the substance or mixture: When heated to decomposition, emits toxic fumes of chlorine gases.

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. For small spills use paper towel. 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. Keep it tightly closed.

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: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: not available

Viscosity: not available

Flash point: Not available

Autoignition: Not available

Boiling point: Not available

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Miscible.

Specific gravity (H₂O = 1): Not available

Percent volatile (%): 100 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials.

Incompatibilities: Acids, Strong oxidizing agents, Halogens, Bromine Trifluoride.

Hazardous decomposition: When heated to decomposition, emits toxic Hydrogen chloride, oxides of lithium.

Hazardous polymerization: Not available.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Causes serious eye irritations. Skin: May cause skin irritation. Inhalation: Not expected to cause adverse effects. Ingestion: Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Toxicological data:

Acute oral toxicity ORAL LD₅₀: 526 mg/kg [Rat] as lithium chloride.

Acute dermal toxicity LD₅₀: 1629 mg/kg [Rabbit] as lithium chloride.

Acute inhalation toxicity LC₅₀: 5.57mg/L [Rat] 4h as lithium chloride

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

LC50: 158 ppm 96h [Trout]. 249 ppm 48h [Daphnia]

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: Not available

Shipping name: Not controlled.

Hazard Class: N/A

Packing group: N/A

Exceptions: N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed as lithium chloride. DSCL (EEC) R36/R38– irritating to eyes and skin. R22–Harmful if swallowed. S46–If swallowed, seek medical advice immediately and show the container or label.

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: 111-4EA, A111-4, C111-4

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 a dangerous substance or mixture according to the Globally Harmonized System (GHS)

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	75-90%	Not classified
Potassium chloride	CAS#7447-40-7	10-25%	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: None 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:

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: Strontium Chloride Solution
Alternative names: Strontium chloride water solution.
Product Number: 111-6EA, A111-6, C111-6

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

Eye Damage (Category 1), H318



Pictogram:

2.2 Label elements, including precautionary statements

Signal word: Danger
Hazards statements: H318 - Causes eye damage.
Precautionary statements: P264 - Wash skin thoroughly after handling, P280 - Wear protective gloves, eye protection, P301+P312+P330-IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

2.3 Hazards not otherwise classified: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: N/A

3.2 Mixture:

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS# 7732-18-5	75-90%	Not classified
Strontium chloride	CAS# 10025-70-4	10-25%	Eye Dam. 1, H318

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 immediate medical attention.

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

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: Not flammable

Suitable extinguishing media: Use extinguishing methods for surrounding fires.

5.2 Special hazard arising from the substance or mixture: When heated to decomposition, emits toxic fumes of chlorine gases.

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. For small spills use paper towel. 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. Keep It tightly closed.

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: Not available

Vapor Pressure (mm Hg): Not available

Vapor Density: Not available

Evaporation Rate: not available

Viscosity: not available

Flash point: Not available

Autoignition: Not available

Boiling point: Not available

Melting point: Not available

Freezing point: Not available

Decomposition temp: Not available

Solubility: Miscible.

Specific gravity (H₂O = 1): Not available

Percent volatile (%): 100 Wt%

Molecular formula: Mixture

Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials.

Incompatibilities: Strong oxidizing agents.

Hazardous decomposition: When heated to decomposition, emits toxic chlorine gases.

Hazardous polymerization: Not available.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Causes serious eye irritations. May cause eye injury with possible eye damage. Skin: May cause skin irritation. Inhalation: Not expected to cause adverse effects. Ingestion: May be harmful if swallowed.

Toxicological data:

Acute oral toxicity ORAL LD₅₀: Not available

Acute dermal toxicity LD₅₀: Not available

Acute inhalation toxicity LC₅₀: Not available

Carcinogenicity:

California prop 65: Not classified

12. ECOLOGICAL INFORMATION

Not 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: Not available

Shipping name: Not controlled.

Hazard Class: N/A

Packing group: N/A

Exceptions: N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed as strontium chloride. EC-No (233-971-6). DSCl (EEC) R36/R38-- irritating to eyes and skin. R22-Harmful if swallowed. S46-If swallowed, seek medical advice immediately and show the container or label.

16. OTHER INFORMATION

Disclaimer:

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