### MSDS - Material Safety Data Sheet

## Product Name: Ephedrine Reagent (Ampoule 1)

MSDS No.: NARK20013A

EVIDENT, INC. 1-800-576-7606

www. Evident Crime Scene.com

contact@evident.cc

Manufacture: Sirchie Finger Print Laboratories Address: 100 Hunter Place City, ST Zip: Youngsville, NC 27596 Emergency Contact: ChemTree Emergency Telephone Number: 800-424-9300 Contact: Tech Support Information Telephone Number: 919-554-2244 Last Update: 01/31/2011 Expiration Date: Chemical State:   Liquid   Gas   Solid   1 Reactivity H   Pers. Protection    I. Ingredients:	I. Basic In	formation:								
Address: 100 Hunter Place City, ST Zip: Youngaville, NC 27596 Emergency Contact: ChemTrec Emergency Telephone Number: 800-424-9300 Contact: Tech Support Information Telephone Number: 919-554-2244  Last Update: 01/31/2011 Expiration Date: Chemical State: X Liquid							IEDA 🛆			
Emergency Contact: ChemTree Emergency Telephone Number: 800-424-9300 Contact: Tech Support Information Telephone Number: 919-554-2244 Last Update: 01/31/2011		_	ľ	/ Fire \						
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Emergency Telephone Number: 800-424-9300  Contact: Tech Support  Information Telephone Number: 919-554-2244  Last Update: 01/31/2011		-	96			<	( 1 X	1		
Contact: Tech Support  Information Telephone Number: 919-554-2244  Last Update: 01/31/2011 Expiration Date:  Chemical State:  Liquid  Gas Solid  In Reactivity  H Pers. Protection  II. Ingredients:  Trade Secret  EHS IARC SARA 313 OSHA ACGIH Other  CAS No. Chemical Name  9/4 Range  NTP SUB Z PEL TLV Limits  64197 Acetic acid  1 10 ppm 10 ppm 103 F  7758987 Copper (II) sulfate  1 NE NE 200 C  7732165 Water (Distilled)  98 NE None None 212 F  III. Hazardous Identification:  Hazard Category:  Acute  Correct  Pressure  Reactive  Hazardous Identification Information:  May be harmful fi inhaled or swallowed. May cause respiratory and digestive tract irritation. May cause skin irritation. Severe eye irritant.  The chemical, physical, and toxicological properties of copper (II) sulfate have not been thoroughly investigated.  This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.  IV. First Aid Measures:  Route(s) of Entry:  Inhalation, ingestion, skin, eyes  Health Hazards (Acute and Chronic):  Acute: Gastrointestinal disturbances  Chronic: Dermatitis, chronic bronchitis, erosion of teeth  Signs and Symptoms:								$\checkmark$		
Information Telephone Number: 919-554-2244  Last Update: 01/31/2011 Expiration Date:  Chemical State:  Liquid	Emergency To	elephone Number: 8	00-424-9300				Specjal			
Last Update: 01/31/2011 Expiration Date:  Chemical State:  Liquid	Contact: Tec	h Support								
Chemical State:	Information T	elephone Number: 9		1 Health						
Chemical Type: Pure Mixture    H   Pers. Protection	Last Update:	01/31/2011 <b>E</b>	Expiration Date:				2 Flammability			
II. Ingredients:  Trade Secret  EHS JARC SARA 313 OSHA ACGIH Other Limits 64197 Acetic acid 1 10 ppm 10 ppm 103 F 7758987 Copper (II) sulfate 1 Ne NE NE 200 C 7732185 Water (Distilled) 98 None None 212 F  III. Hazardous Identification: Hazard Category:  X Acute X Chronic Fire Pressure Reactive  Hazardous Identification Information: May be harmful if inhaled or swallowed. May cause respiratory and digestive tract irritation. May cause skin irritation. Severe eye irritant.  The chemical, physical, and toxicological properties of copper (II) sulfate have not been thoroughly investigated.  This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.  IV. First Aid Measures:  Route(s) of Entry: Inhalation, ingestion, skin, eyes  Health Hazards (Acute and Chronic): Acute: Gastrointestinal disturbances Chronic: Dermatitis, chronic bronchitis, erosion of teeth  Signs and Symptoms:	Chemical Sta	te: X Liquid	Gas	Solid			1 Reactivity			
Trade Secret    EHS   IARC   SARA   313   OSHA   ACGIH   Other	Chemical Typ	e: Pure	X Mixture	_			H Pers. Pr	otection		
Trade Secret    EHS   IARC   SARA   313   OSHA   ACGIH   Other		_								
CAS No. Chemical Name	II. Ingredie	ents:								
CAS No. Chemical Name	Trade Sec	cret								
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7758987 Copper (II) sulfate 1 NE NE 200 C 7732185 Water (Distilled) 98 None None 212 F	CAS No.	Chemical Name		% Range	NTP					
7732185 Water (Distilled) 98 None None 212 F    III. Hazardous Identification:   Hazard Category:   X Acute   X Chronic   Fire   Pressure   Reactive    Hazardous Identification Information:   May be harmful if inhaled or swallowed. May cause respiratory and digestive tract irritation. May cause skin irritation. Severe eye irritant.   The chemical, physical, and toxicological properties of copper (II) sulfate have not been thoroughly investigated.   This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.   IV. First Aid Measures:   Route(s) of Entry:   Inhalation, ingestion, skin, eyes   Health Hazards (Acute and Chronic):   Acute: Gastrointestinal disturbances   Chronic: Dermatitis, chronic bronchitis, erosion of teeth   Signs and Symptoms:	64197	Acetic acid		1	1	<u> </u>	10 ppm	10 ppm	103 F	
Hazardous Identification:   Hazard Category:   X   Acute   X   Chronic   Fire   Pressure   Reactive	7758987	Copper (II) sulfate		1			NE	NE	200 C	
Hazard Category:    X   Acute   X   Chronic   Fire   Pressure   Reactive	7732185	Water (Distilled)		98			None	None	212 F	
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Signs and Symptoms:	Acute: Ga	astrointestinal disturb	oances							
			ronchitis, erosion o	of teeth						
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Skin, respiratory, eye, liver, kidney diseases

**Medical Conditions Generally Aggravated by Exposure:** 

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### MSDS - Material Safety Data Sheet

### Product Name: Ephedrine Reagent (Ampoule 1)

MSDS No.: NARK20013A

### **Emergency and First Aid Procedures:**

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Get medical attention.

Ingestion: DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of milk or water. (Never give anything by mouth to an unconscious person!) Get medical attention immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Get medical aid immediately.

### Other Health Warnings:

### V. Fire Fighting Measures:

Flash Point: ~103 F Lower Explosive Limit: NE Upper Explosive Limit: NE

F.P. Method:

Fire Extinguishing Media: Dry chemical, carbon dioxide, water spray, alcohol-resistant foam

### **Special Fire Fighting Procedures:**

Wear self-contained breathing apparatus and protective clothing. Water may be used to cool fire-exposed containers.

#### **Unusual Fire and Explosion:**

May react with metals to form combustible hydrogen gas.

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations.

### VI. Accidental Release Measures:

#### Steps to be Taken in Case Material is Released or Spilled:

Wear vapor respirator, safety goggles, and rubber gloves. Remove sources of ignition (i.e. open flames, sparks). Soak up with inert absorbent material (dry soda ash or calcium carbonate recommended; do not use flammable substances such as sawdust). Ventilate and wash spill site with soap and water after collection. Dispose according to local, state, and federal regulations.

### VII. Handling and Storage:

#### Precautions to be Taken:

Keep in tightly closed container. Protect from freezing. Keep cool and dry. Avoid ignition sources (heat, open flame, spark). Avoid incompatible materials. Use only in well-ventilated areas. Avoid contact with skin, eyes, and clothing. Avoid inhalation and ingestion. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

#### Other Precautions:

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations.

### VIII. Exposure Controls/Personal Protection:

### Ventilation Requirements:

Use only in well-ventilated areas.

### **Personal Protective Equipment:**

Safety goggles, gloves, vapor respirator, protective clothing

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### MSDS - Material Safety Data Sheet

### Product Name: Ephedrine Reagent (Ampoule 1)

MSDS No.: NARK20013A

### IX. Physical and Chemical Properties:

Boiling Point: ~212 F Melting Point: ~32 F

Evaporation Rate (Butyl Acetate = 1): NE Vapor Pressure (mm Hg.): NE Specific Gravity (H20 = 1): Vapor Density (AIR = 1): NE

Solubility In Water: Soluble Appearance and Odor: Clear liquid; slight vinegar odor

Other Information:

### X. Stability and Reactivity:

#### Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

### Incompatibility (Materials to Avoid):

Acetaldehyde, 2-aminoethanol, ammonium nitrate, bromine pentafluoride, chlorine trifluoride, acids, anhydrides, diallyl methyl carbinol + ozone, ethylene diamine, ethyleneimene, peroxides, acetone, oleum, permanganates, phosphorus isocyanate, phosphorus trichloride, hydroxides, potassium t-butoxide, xylene, metals, ignition sources (heat, open flame, spark), strong oxidants, acid chlorides, steel, finely powdered metals, hydroxylamine, magnesium. See NFPA Fire Protection guide for all acetic acid incompatibility specifics.

#### **Decomposition/By Products:**

Carbon monoxide and dioxide, combustible hydrogen gas, nitrogen oxides, nitrogen, sulfur oxides

### **Hazardous Polymerization:**

Has not been reported.

### XI. Toxicological Information:

The toxicological properties of copper (II) sulfate have not been thoroughly investigated.

### XII. Ecological Information:

Prevent from entering sewers or waterways. May be toxic to some aquatic life.

### XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

### XIV. Transport Information:

Keep in tightly closed container. Protect from freezing. Keep cool and dry. Avoid ignition sources (heat, open flame, spark). Avoid incompatible materials. Avoid contact with skin, eyes, and clothing. Avoid inhalation and ingestion. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

### IATA

Shipping name: Chemical kit

Hazard class: 9 UN no.: 3316 Packing group: II

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# MSDS - Material Safety Data Sheet

### Product Name: Ephedrine Reagent (Ampoule 1)

MSDS No.: NARK20013A

### XV. Regulatory Information:

All ingredients are listed on the TSCA inventory.

Acetic acid is listed as a Hazardous Substance under the Clean Water Act.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

### XVI. Other Information:

Using this product under normal, properly instructed procedures should not be hazardous.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

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# MSDS - Material Safety Data Sheet

# Product Name: Ephedrine Reagent (Ampoule 2)

MSDS No.: NARK20013B

I. Basic In	nformation:								
Manufacture	er: Sirchie Finger Print Laboratories				NFPA Fire				
Address: 10	00 Hunter Place				1	<b>X</b>			
City, ST Zip	: Youngsville, NC 27596				Health 1	Reastivity 1			
Emergency	Contact: ChemTrec								
Emergency	Telephone Number: 800-424-9300				Special	Y			
Contact: Te	ech Support				Special				
Information	Telephone Number: 919-554-2244				1 Health				
Last Update	: 01/31/2011 <b>Expiration Date</b> :				1 Flammability				
Chemical St	ate: X Liquid Gas	Solid			1 Reactivity				
Chemical Ty	pe: Pure X Mixture	_			H Pers. Pr	otection			
II. Ingred	lients:								
Trade Se									
		RC SAF	RA						
CAS No.	Chemical Name	% Range	NTP	SUB Z	3 OSHA PEL	ACGIH TLV	Other Limits		
1310732	Sodium hydroxide	8			2 mg/m3	2 mg/m3	1,390 C		
7732185	Water (Distilled)	92			None	None	212 F		
III. Haza	rdous Identification:								
Hazard Cate	gory:								
<b>X</b> Acu	ute X Chronic	Fir	re	☐ F	Pressure		Reactive		
	dentification Information: if swallowed. Respiratory and digestive	/e tract irritant. Ski	n and eye in	ritant.					
	erial is subject to the reporting require	ments of Section 3	313 of SARA	Title III and 4	0 CFR Part 37	3.			
IV. First	Aid Measures:								
Route(s) of	Entry:								
Inhalatio	n, ingestion, skin, eyes								
Health Haza	rds (Acute and Chronic):								
Acute: P	Possible skin and eye burns								
Chronic:	Dermatitis								
Signs and S	ymptoms:								
Inhalatio	n: Coughing, possible burns, breathir	ng difficulty							
Ingestion	: Pain, nausea, vomiting, diarrhea, s	hock							
Medical Cor	nditions Generally Aggravated by Expo	sure:							
Skin, eye	e, respiratory diseases								

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### MSDS - Material Safety Data Sheet

### Product Name: Ephedrine Reagent (Ampoule 2)

MSDS No.: NARK20013B

#### **Emergency and First Aid Procedures:**

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Get medical attention.

Ingestion: DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of milk or water. (Never give anything by mouth to an unconscious person!) Get medical attention immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Discard contaminated clothing in a manner which limits further exposure. Seek medical attention.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Get medical aid immediately.

### Other Health Warnings:

### V. Fire Fighting Measures:

Flash Point: NE Lower Explosive Limit: NE Upper Explosive Limit: NE

F.P. Method:

Fire Extinguishing Media: Dry chemical, carbon dioxide, water spray, alcohol-resistant foam

#### **Special Fire Fighting Procedures:**

Wear self-contained breathing apparatus and protective clothing.

### **Unusual Fire and Explosion:**

### VI. Accidental Release Measures:

### Steps to be Taken in Case Material is Released or Spilled:

Wear vapor respirator, safety goggles, and rubber gloves. Remove sources of ignition (i.e. open flames, sparks). Soak up with inert absorbent material (do not use flammable substances such as sawdust). Ventilate and wash spill site after collection. Dispose according to local, state, and federal regulations.

### VII. Handling and Storage:

### Precautions to be Taken:

Keep in closed container. Keep cool and dry. Avoid incompatible materials. Use only in well-ventilated areas. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.

#### Other Precautions:

### VIII. Exposure Controls/Personal Protection:

### Ventilation Requirements:

Use only in well-ventilated areas.

### Personal Protective Equipment:

Safety goggles, gloves, vapor respirator, protective clothing

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### MSDS - Material Safety Data Sheet

### Product Name: Ephedrine Reagent (Ampoule 2)

MSDS No.: NARK20013B

### IX. Physical and Chemical Properties:

Boiling Point: ~212 F Melting Point: ~32 F

Evaporation Rate (Butyl Acetate = 1): NE Vapor Pressure (mm Hg.): NE

Specific Gravity (H20 = 1): Vapor Density (AIR = 1): NE

Solubility In Water: Soluble Appearance and Odor: Odorless clear liquid

Other Information:

### X. Stability and Reactivity:

#### Stability:

Stable

### Incompatibility (Materials to Avoid):

Moisture, acids, carbon dioxide, cinnamaldehyde, zinc, chloroform + methane, metals, alloys, flammable liquids, organic halogens

### **Decomposition/By Products:**

Sodium oxide & peroxide, flammable hydrogen gas

### **Hazardous Polymerization:**

Has not been reported.

### XI. Toxicological Information:

Harmful if swallowed. Respiratory and digestive tract irritant. Skin and eye irritant.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

### XII. Ecological Information:

Prevent from entering sewers or waterways. May be toxic to some aquatic life. Once liquid, sodium hydroxide leaches rapidly into the soil, possibly contaminating water sources.

### XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

### XIV. Transport Information:

Keep in closed container. Keep cool and dry. Avoid incompatible materials. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.

IATA

Shipping name: Chemical kit

Hazard class: 9 UN no.: 3316 Packing group: II

### XV. Regulatory Information:

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# MSDS - Material Safety Data Sheet

Product Name: Ephedrine Reagent (Ampoule 2)

MSDS No.: NARK20013B

All ingredients are listed on the TSCA inventory.

Sodium hydroxide is listed as a Hazardous Substance under the Clean Water Act.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

### XVI. Other Information:

Using this product under normal, properly instructed procedures should not be hazardous.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.