

**MSDS - Material Safety Data Sheet****Product Name: Talwin Reagent (Ampoule 1)**

EVIDENT, INC.  
 1-800-576-7606  
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MSDS No.: NARK20012A

**I. Basic Information:**

Manufacturer: Sirchie Finger Print Laboratories

Address: 100 Hunter Place

City, ST Zip: Youngsville, NC 27596

Emergency Contact: ChemTrec

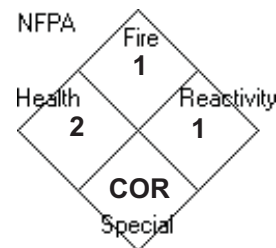
Emergency Telephone Number: 800-424-9300

Contact: Tech Support

Information Telephone Number: 919-554-2244

Last Update: 01/31/2011

Expiration Date:

Chemical State:  Liquid  Gas  SolidChemical Type:  Pure  Mixture

2	Health
1	Flammability
1	Reactivity
H	Pers. Protection

**II. Ingredients:** Trade Secret

CAS No.	Chemical Name	% Range	EHS		IARC		SARA		OSHA PEL	ACGIH TLV	Other Limits
			NTP		SUB Z	313					
7664939	Sulfuric acid	99.4	X		X		X		1 mg/m3	1 mg/m3	554 F

**III. Hazardous Identification:**

Hazard Category:

 Acute  Chronic  Fire  Pressure  Reactive
**Hazardous Identification Information:**

Strong oxidizer. Corrosive. Harmful if inhaled or swallowed. May cause severe respiratory and digestive tract irritation with possible severe burns. Causes severe skin and eye burns.

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: Severe skin and eye burns

Chronic: Nosebleeds, nasal congestion, erosion of the teeth, bronchitis, conjunctivitis, dermatitis

**Signs and Symptoms:**

Inhalation: Sore throat, coughing, shortness of breath, delayed lung edema

**Medical Conditions Generally Aggravated by Exposure:**

Respiratory, skin, eye, liver, kidney, heart diseases

**Emergency and First Aid Procedures:**

# MSDS - Material Safety Data Sheet

## Product Name: Talwin Reagent (Ampoule 1)

### MSDS No.: NARK20012A

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. (DO NOT use mouth-to-mouth 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. SPEEDY ACTION IS CRITICAL!

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: Carbon dioxide, dry chemical--DO NOT use water!

### Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective clothing. DO NOT get water inside containers. Cool containers with flooding amounts of water until well after fire is out.

### Unusual Fire and Explosion:

Strong oxidizer. Contact with combustible materials could start a fire. Contact with water may generate heat and spatter material. Contact with metals may generate flammable hydrogen gas. Containers may explode when heated or contaminated with water.

### VI. Accidental Release Measures:

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

Wear vapor respirator, safety goggles, and rubber gloves. Soak up with inert absorbent material (sand, dry lime, or soda ash recommended; do not use flammable substances such as sawdust). DO NOT put water directly on leak, spill area, or inside container. Dispose according to local, state, and federal regulations.

### VII. Handling and Storage:

#### Precautions to be Taken:

Keep in tightly closed container. Keep cool and dry. Avoid incompatible materials, especially water. Use only in well-ventilated areas. Avoid contact with skin, eyes, and clothing. Do not ingest or inhale. Avoid prolonged or repeated exposure. 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

# MSDS - Material Safety Data Sheet

## Product Name: Talwin Reagent (Ampoule 1)

MSDS No.: NARK20012A

### IX. Physical and Chemical Properties:

Boiling Point: 554 F

Melting Point: 50.6 F

Evaporation Rate (Butyl Acetate = 1): \*

Vapor Pressure (mm Hg.): 0.00120

Specific Gravity (H2O = 1):

Vapor Density (AIR = 1): 1.2

Solubility In Water: Soluble

Appearance and Odor: Colorless, odorless liquid

Other Information: \* Evaporation Rate: Slower than ether

### X. Stability and Reactivity:

#### Stability:

Stable under normal temperatures and pressures.

#### Incompatibility (Materials to Avoid):

Acetic anhydride, cyanohydrins, acetone + nitric acid, acetone + potassium dichromate, acetonitrile + sulfur trioxide, acrolein, acrylonitrile, alcohols, hydrogen peroxide, allyl chloride, 2-aminoethanol, ammonium hydroxide, ammonium iron (III) sulfate dodecahydrate, ammonium triperchromate, aniline + glycerol + nitrobenzene, bromates + metals, tert-butyl-m-xylene + nitric acid, 1-chloro-2,3-epoxypropane, bromine pentafluoride, n-butyraldehyde, carbides, chlorates, 4-chloronitrobenzene + sulfur trioxide, copper, dichloromethane + ethanol + nitrate or nitrite, 2-cyano-4-nitrobenzenediazonium hydrogen sulfate, 2-cyano-2-propanol, chlorine trifluoride, chlorosulfonic acid, cyclopentadiene, cyclopentanone oxime, 1,3-diazidobenzene, diethylamine, cuprous nitride, diisobutylene, epichlorohydrin, ethylene diamine, ethylene glycol, dimethoxydinitroanthraquinone, 4-dimethylaminobenzaldehyde, 2,5-dinitro-3-methylbenzoic acid + sodium azide, 1,5-dinitronaphthalene + sulfur, ethoxylated nonylphenol, hexalithium disilicide, ethylenimine, fulminates, acids, iodine heptafluoride, metals, isoprene, metal acetylides, perchlorates, 4-methylpyridine, nitramide, nitric acid + organic materials, nitric acid + toluene, nitroaryl bases & derivatives, nitrobenzene, nitromethane, n-nitromethylamine, 4-nitrotoluene, permanganates, phosphorus, phosphorus (III) oxide, poly(silylene), mercuric nitride, oxides, p-nitrotoluene, pentasilver trihydroxydiaminophosphate, permanganates + benzene, phosphorus isocyanate, picrates, potassium t-butoxide, potassium, 3-propynol, beta-propiolactone, pyridine, silver peroxychromate, sodium, sodium carbonate, sodium tetrahydroborate, sodium thiocyanate, sucrose, tetramethylbenzenes, 1,2,4,5-tetrazine, thalium (I) azidodithiocarbonate, 1,3,5-trinitrosohexahydro-1,3,5-triazine, zinc iodide, combustible materials

#### Decomposition/By Products:

Sulfur oxides, flammable hydrogen gas

#### Hazardous Polymerization:

Has not been reported.

### XI. Toxicological Information:

Carcinogenicity

Sulfuric acid

ACGIH--A2: Suspected human carcinogen

OSHA--Select carcinogen

IARC--Group 1: Carcinogenic to humans

### XII. Ecological Information:

Prevent from entering sewers or waterways. Toxic to some aquatic life.

### XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

# *MSDS - Material Safety Data Sheet*

***Product Name: Talwin Reagent (Ampoule 1)***

***MSDS No.: NARK20012A***

## ***XIV. Transport Information:***

Keep in tightly closed container. Keep cool and dry. Avoid incompatible materials, especially water. Avoid contact with skin, eyes, and clothing. Do not ingest or inhale. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

IATA

Shipping name: Chemical kit

Hazard class: 9

UN no.: 3316

Packing group: II

## ***XV. Regulatory Information:***

Sulfuric acid is listed on the TSCA inventory.

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

Sulfuric acid is listed on the EPA Extremely Hazardous Substances (EHS) list.

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.

**MSDS - Material Safety Data Sheet****Product Name: Talwin Reagent (Ampoule 2)**

MSDS No.: NARK20012B

**I. Basic Information:**

Manufacturer: Sirchie Finger Print Laboratories

Address: 100 Hunter Place

City, ST Zip: Youngsville, 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:  Liquid  Gas  SolidChemical Type:  Pure  Mixture

2	Health
1	Flammability
0	Reactivity
H	Pers. Protection

**II. Ingredients:** Trade Secret

CAS No.	Chemical Name	% Range	EHS		IARC		SARA 313		OSHA PEL	ACGIH TLV	Other Limits
			NTP		SUB Z						
7697372	Nitric acid	4.76	X				X		2 ppm	2 ppm	187 F
7732185	Water (Distilled)	95.24							None	None	212 F

**III. Hazardous Identification:**

Hazard Category:

 Acute  Chronic  Fire  Pressure  Reactive

Hazardous Identification Information:

Respiratory tract irritant. Skin and eye irritant. Causes severe skin and eye burns. May cause lung injury.

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: Severe skin and eye burns

Chronic: Erosion of the teeth

Signs and Symptoms:

Medical Conditions Generally Aggravated by Exposure:

Pulmonary, eye, skin diseases

Emergency and First Aid Procedures:

# MSDS - Material Safety Data Sheet

## Product Name: Talwin Reagent (Ampoule 2)

### MSDS No.: NARK20012B

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 large quantities of 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: NE

Lower Explosive Limit: 1,000

Upper Explosive Limit: 1,000

### F.P. Method:

Fire Extinguishing Media: Water spray

### Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective clothing.

### Unusual Fire and Explosion:

Organic materials may ignite spontaneously or have greatly increased flammability.

### VI. Accidental Release Measures:

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

Wear vapor respirator, safety goggles, and rubber gloves. Soak up with inert absorbent material (sodium bicarbonate, soda ash, or slaked lime recommended; do not use flammable substances such as sawdust). Flush spill with plenty of water. Ventilate 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. Avoid incompatible materials. Use only in well-ventilated areas. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor. Wash thoroughly after handling. Be prepared to neutralize and absorb spilled acid.

#### 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

# MSDS - Material Safety Data Sheet

## Product Name: Talwin Reagent (Ampoule 2)

MSDS No.: NARK20012B

### IX. Physical and Chemical Properties:

**Boiling Point:** <122 C

**Melting Point:** NE

**Evaporation Rate (Butyl Acetate = 1):** NE

**Vapor Pressure (mm Hg.):** <3.0

**Specific Gravity (H2O = 1):**

**Vapor Density (AIR = 1):** ~2-3

**Solubility In Water:** Complete

**Appearance and Odor:** Clear, colorless; acrid odor

**Other Information:**

### X. Stability and Reactivity:

**Stability:**

Stable

**Incompatibility (Materials to Avoid):**

Elevated temperatures, combustible organic materials, readily oxidizable materials, wood, turpentine, metal powders, hydrogen sulfide, strong bases, carbides

**Decomposition/By Products:**

Nitrogen oxides

**Hazardous Polymerization:**

Does not occur.

### XI. Toxicological Information:

Respiratory tract irritant. Skin and eye irritant. Causes severe skin and eye burns. May cause lung injury.

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.

### XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

### XIV. Transport Information:

Keep in closed container. Keep cool. Avoid incompatible materials. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor. Wash thoroughly after handling. Be prepared to neutralize and absorb spilled acid.

IATA

Shipping name: Chemical kit

Hazard class: 9

UN no.: 3316

Packing group: II

### XV. Regulatory Information:

# *MSDS - Material Safety Data Sheet*

## *Product Name: Talwin Reagent (Ampoule 2)*

### ***MSDS No.: NARK20012B***

Nitric acid is listed on the TSCA inventory.

Nitric acid is listed on the EPA Extremely Hazardous Substances (EHS) list.

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

Nitric acid is considered highly hazardous by OSHA.

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.