

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 04.28.2017

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## Chromatography Solvent

### SECTION 1: Identification

#### Product identifier

**Product name:** Chromatography Solvent

**Product code:** CH1910SS

#### Recommended use of the product and restriction on use

**Relevant identified uses:** Laboratory Chemicals

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

##### Manufacturer:

##### United States

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331

1-717-632-1291

#### Emergency telephone number:

##### Canada

##### ChemTel: (24-hour)

+1(800)255-3924

+1(813)248-0585 (International)

### SECTION 2: Hazard identification

#### GHS classification:

Flammable liquids, category 2

Serious eye damage, category 1

Skin corrosion, category 1A

Acute toxicity (oral), category 4

Specific target organ toxicity - single exposure, category 3, respiratory irritation

Specific target organ toxicity - single exposure, category 3, central nervous system

#### Label elements

##### Hazard pictograms:



**Signal word:** Danger

#### Hazard statements:

H225 Highly flammable liquid and vapor.

H318 Causes serious eye damage.

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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#### Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P270 Do not eat, drink or smoke when using this product.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/light/equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P370+P378 In case of fire: Use agents recommended in section 5 for extinction.  
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P363 Wash contaminated clothing before reuse.  
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.  
P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.  
P405 Store locked up.  
P403+P233 Store in a well ventilated place. Keep container tightly closed.  
P501 Dispose of contents and container as instructed in Section 13.

**Hazards not otherwise classified:** None

### SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 64-17-5	Ethanol, Denatured	<39
CAS number: 7732-18-5	Water	>14
CAS number: 71-36-3	n-Butyl Alcohol	<31
CAS number: 64-19-7	Acetic Acid	<16

**Additional Information:** None

### SECTION 4: First-aid measures

#### Description of first-aid measures

##### General notes:

Not determined or not available.

##### After inhalation:

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Move exposed individual to fresh air  
Loosen clothing as necessary and position individual in a comfortable position  
Maintain an unobstructed airway  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### After skin contact:

Immediately remove all contaminated clothing  
Wash affected area with soap and water  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
Remove contact lens(es) if able to do so during rinsing  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### After ingestion:

Immediately call a POISON CONTROL CENTER or seek medical attention  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Not determined or not available.

#### Delayed symptoms and effects:

Not determined or not available.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## SECTION 5: Fire-fighting measures

### Extinguishing media

#### Suitable extinguishing media:

Use dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

#### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors  
Vapors can flow to distant ignition sources and flashback  
Liquid is volatile and may generate an explosive atmosphere

### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing  
Refer to Section 8

### Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols  
Avoid contact with skin, eyes and clothing

## SECTION 6: Accidental release measures

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#### Personal precautions, protective equipment and emergency procedures:

- Ensure adequate ventilation
- Ensure air handling systems are operational
- Beware of vapors accumulating to form explosive concentrations
- Vapors can accumulate in low areas

#### Environmental precautions:

- Should not be released into the environment
- Prevent from reaching drains, sewer or waterway

#### Methods and material for containment and cleaning up:

- Wear protective eye wear, gloves and clothing
- Use spark-proof tools and explosion-proof equipment

#### Reference to other sections:

- Not determined or not applicable.

### SECTION 7: Handling and storage

#### Precautions for safe handling:

- Do not eat, drink, smoke or use personal products when handling chemical substances.
- Avoid breathing mist or vapor.
- Use only non-sparking tools.
- Take precautionary measures against electrostatic discharges.

#### Conditions for safe storage, including any incompatibilities:

- Store in a cool, well-ventilated area.
- Keep container tightly sealed.
- Keep away from all ignition sources: open flames, hot surfaces, direct sunlight, spark sources.
- Store locked up.
- Use appropriate containment to avoid environmental contamination.
- Protect from freezing and physical damage.

### SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

#### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Ethanol, Denatured	64-17-5	ACGIH TLV TWA 1,000 ppm
	Ethanol, Denatured	64-17-5	ACGIH TLV STEL 1,000 ppm
	n-Butyl Alcohol	71-36-3	ACGIH TLV 8 Hour TWA: 20 ppm
	Acetic Acid	64-19-7	ACGIH TLV TWA 10 ppm
	Acetic Acid	64-19-7	ACGIH TLV STEL 15 ppm
United States (OSHA)	Ethanol, Denatured	64-17-5	OSHA PEL TWA 1,000 ppm
	Ethanol, Denatured	64-17-5	OSHA PEL TWA 1,900 mg/m <sup>3</sup>
	n-Butyl Alcohol	71-36-3	OSHA PEL Time Weighted Avg: 100 ppm
	Acetic Acid	64-19-7	OSHA PEL TWA 10 ppm
	Acetic Acid	64-19-7	OSHA PEL TWA 25 mg/m <sup>3</sup>
NIOSH	Ethanol, Denatured	64-17-5	NIOSH REL TWA 1,000 ppm

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Ethanol, Denatured	64-17-5	NIOSH REL TWA 1,900 mg/m <sup>3</sup>
	n-Butyl Alcohol	71-36-3	NIOSH IDLH: 1400 ppm
	Acetic Acid	64-19-7	NIOSH REL TWA 10 ppm
	Acetic Acid	64-19-7	NIOSH REL TWA 25 mg/m <sup>3</sup>
	Acetic Acid	64-19-7	NIOSH REL ST 15 ppm
	Acetic Acid	64-19-7	NIOSH REL ST 37 mg/m <sup>3</sup>

#### Biological limit values:

No biological exposure limits noted for the ingredient(s).

#### Information on monitoring procedures:

Not determined or not applicable.

#### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Use explosion-proof ventilation equipment.

#### Personal protection equipment

##### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

##### Skin and body protection:

Select glove material impermeable and resistant to the substance.

##### Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

#### General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance (physical state, color):</b>	Clear, colorless liquid
<b>Odor:</b>	Strong characteristic odor
<b>Odor threshold:</b>	Not available
<b>pH-value:</b>	Not available
<b>Melting/Freezing point:</b>	Not available
<b>Boiling point/range:</b>	77°C
<b>Flash point:</b>	15.5°C
<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gaseous):</b>	Flammable
<b>Explosion limit upper:</b>	Not available
<b>Explosion limit lower:</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>Vapor density:</b>	Not available

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Density:	Not available
Relative density:	Not available
Solubilities:	Not determined or not available.
Partition coefficient (n-octanol/water):	Not available
Auto/Self-ignition temperature:	Not available
Decomposition temperature:	Not available
Dynamic viscosity:	Not available
Kinematic viscosity:	Not available
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

### Other information

### SECTION 10: Stability and reactivity

#### Reactivity:

Does not react under normal conditions of use and storage.

#### Chemical stability:

Stable under normal conditions of use and storage.

#### Possibility of hazardous reactions:

None under normal conditions of use and storage.

#### Conditions to avoid:

Excess heat, ignition source or flames.

#### Incompatible materials:

None known.

#### Hazardous decomposition products:

None known.

### SECTION 11: Toxicological information

#### Acute toxicity

**Assessment:** Harmful if swallowed

**Product data:** No data available.

#### Substance data:

Name	Route	Result
n-Butyl Alcohol	oral	LD50 - Rat - 790 mg/kg

#### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

**Product data:** No data available.

#### Substance data:

Name	Result
n-Butyl Alcohol	Irritant to skin and mucous membranes
Acetic Acid	Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

**Assessment:** Causes serious eye damage

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**Product data:** No data available.

**Substance data:**

Name	Result
n-Butyl Alcohol	Irritating to eyes, nose and throat.

#### Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):**

Name	Classification
Ethanol, Denatured	Group 1 - Carcinogenic to humans

**National Toxicology Program (NTP):** None of the ingredients are listed.

#### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Specific target organ toxicity (single exposure)

**Assessment:** May cause respiratory irritation May cause drowsiness or dizziness

**Product data:** No data available.

**Substance data:**

Name	Result
n-Butyl Alcohol	Component may affect the respiratory and central nervous system through single exposure.
	May cause drowsiness or dizziness

#### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

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**Other information:** No data available.

## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.


## SECTION 13: Disposal considerations

### Disposal methods:


It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

## SECTION 14: Transport information

### Canadian Transportation of Dangerous Goods (TDG)

UN number	1120
UN proper shipping name	Butanols
UN transport hazard class(es)	3 
Packing group	III
Environmental hazards	None
Special precautions for user	None

### International Maritime Dangerous Goods (IMDG)

UN number	1120
UN proper shipping name	Butanols
UN transport hazard class(es)	3 



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Packing group	III
Environmental hazards	None
Special precautions for user	None

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	1120
UN proper shipping name	Butanols
UN transport hazard class(es)	3
Packing group	III
Environmental hazards	None
Special precautions for user	None



### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

## SECTION 15: Regulatory information

### Canada regulations

#### Domestic substances list (DSL):

64-17-5	Ethanol, Denatured	Listed
71-36-3	n-Butyl Alcohol	Listed
64-19-7	Acetic Acid	Listed
7732-18-5	Water	Listed

**Non-domestic substances list (NDSL):** Not determined.

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

### Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 2-3-0

**HMIS:** 2-3-0

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**End of Safety Data Sheet**