



# Safety Data Sheet

## Carbol Fuchsin, Ziehl-Neelsen

### 1. Identification

**Product Name:** Carbol Fuchsin, Ziehl-Neelsen

**Item #:** SKC1069-500, SKC1069-250, MA0103033

**Web**

**SDS:** S132

**Synonyms:** N/A

**Recommended Use:** Special Stain

**Manufacturer:**

BBC Biochemical  
409 Eleanor Lane  
Mount Vernon, WA 98273  
1-800-635-4477

**Restrictions on Use:** N/A

**In Case of Emergency:**

Chemtrec US 1-800-424-9300  
Chemtrec International 703-527-3887

### 2. Hazards Identification

**OSHA Hazard Classification(s):**

Acute Toxicity - Inhalation - Category 3  
Skin Corrosion - Category 1B  
Eye Damage - Category 1  
Germ Cell Mutagenicity - Category 1B  
Toxic to Reproduction - Category 2  
Specific Target Organ Toxicity (single exposure) - Category 2  
Specific Target Organ Toxicity (repeated exposure) - Category 2  
Carcinogenicity - Category 2

**Signal Word:** Danger

**Hazard Statement(s):** Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause genetic defects. Suspected of damaging fertility of the unborn child. May cause damage to organs(respiratory system). May cause damage to organs (respiratory system, central nervous system, liver, blood) through prolonged or repeated exposure. Suspected of causing cancer.

**Pictogram(s):**



**Precautionary Statement(s):** Prevention: Avoid breathing dust, vapors. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wash body thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, vapors. Do not eat, drink or smoke when using this product. P0

Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor. Specific treatment (see first aid section on this label). If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. Immediately call a doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing If exposed or concerned: Get medical attention. If exposed or concerned: Call a doctor. Call a doctor if you feel unwell.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

**Descriptions of Hazards not otherwise classified:** N/A

**Percent of mixture with unknown acute toxicity:** N/A

### 3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Water		7732-18-5	Trade Secret
Denatured Ethanol	Ethyl Alcohol	64-17-5	Trade Secret



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## Carbol Fuchsin, Ziehl-Neelsen

Phenol		108-95-2	Trade Secret
Select Stains		Trade Secret	Trade Secret

### 4. First Aid Measures

**Eye Contact:** Corrosive to eyes, causes permanent damage. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** Corrosive to skin, causes permanent damage. If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** Vapor harmful. Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion), muscle ache, pain; dark urine; cyanosis; liver, kidney damage; skin burns; dermatitis; ochronosis; tremor, convulsions, twitching.

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

### 5. Fire- Fighting Measures

**Extinguishing Media:** Dry chemical, carbon dioxide, alcohol foam, water.

**Fire Hazards (Chemical):** Not flammable.

**Special Protective Equipment:** Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

### 6. Accidental Release Measures

**Emergency Procedures:** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

**Protective Equipment:** See section 8

**Environmental Precautions:** Prevent release to the environment by using barriers.

**Containment and Clean-Up Procedures:** Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

### 7. Handling and Storage

**Handling:** Do not breathe vapors. Do not eat, drink or smoke when using this product.

**Storage:** Store in refrigerator to keep cold. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### 8. Exposure Controls/Personal Protection

#### OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Phenol	108-95-2	5 ppm (19 mg/m <sup>3</sup> ) [skin]
Ethyl Alcohol	64-17-5	1000 ppm (1900 mg/m <sup>3</sup> )

#### ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Phenol	108-95-2	5 ppm (19 mg/m <sup>3</sup> ) [skin]	
Ethyl Alcohol	64-17-5	1000ppm	

**Engineering Controls:** Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

**Personal Protective Measures:** Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

**Special PPE Requirements:** If ventilation hood not available wear respirator.



## Carbol Fuchsin, Ziehl-Neelsen

### 9. Physical and Chemical Properties Section

**Appearance:** Dark Violet, Liquid  
**Molecular Weight:** N/A  
**Molecular Formula:** N/A  
**pH:** N/A  
**Boiling Point and Boiling Range:** N/A  
**Melting Point/Freezing Point:** N/A  
**Flash Point:** N/A  
**Specific Gravity/Relative Density:** N/A  
**Odor:** N/A  
**Odor Threshold:** N/A  
**Color:** Dark Violet  
**Flammability (solid/gas):** N/A  
**Vapor Density:** N/A  
**Upper/Lower flammability or explosive limits:** N/A  
**Vapor Pressure:** N/A  
**Evaporation Rate:** N/A  
**Partition Coefficient: n-octanol/water:** N/A  
**Viscosity:** N/A  
**Auto-ignition temperature:** N/A  
**Solubility:** N/A  
**Decomposition Temperature:** N/A

### 10. Stability and Reactivity

**Reactivity:**  
**Chemical Stability:** Stable  
**Conditions of Stability/Instability:** N/A  
**Stabilizers needed:** None  
**Safety issue indicated by appearance change:** N/A  
**Other:** N/A  
**Hazardous Reactions:** N/A  
**Hazardous Polymerization:** Does not occur  
**Conditions to avoid:** Heat, open flame.  
**Classes of Incompatible Materials:** Oxidizers, Strong Acids, Strong Bases, calcium hypochlorite, aluminum chloride, acids  
**Hazardous Decomposition Products:** Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

### 11. Toxicological Information

#### Likely Routes of Exposure

**Eyes:** Irritation.  
**Skin:** Irritation.  
**Inhalation:** Dizziness, headache.  
**Ingestion:** Irritation eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion),

**Signs or Symptoms of Exposure:** Irritation eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion), muscle ache, pain; dark urine; cyanosis; liver, kidney damage; skin burns; dermatitis; ochronosis; tremor, convulsions, twitching. Target Organs: Eyes, skin, respiratory system, liver, kidneys  
**Effects from short term exposure (delayed, immediate, chronic):** Irritation to the eyes, nose, throat; headache, dizziness, nausea.



## Carbol Fuchsin, Ziehl-Neelsen

**Acute Toxicity (Numerical Measures):** Phenol CAS# 108-95-2: orl mus LD50 270 mg/kg; orl rat LD50 317 mg/kg; skn rat LD50 669 mg/kg; skn rbt LD50 630 mg/kg; ihl mus LC50 177 mg/m<sup>3</sup>; ihl rat LC50 316 mg/m<sup>3</sup>.

**Carcinogenicity (NTP, IARC, OSHA):** Contains Basic Fuchsin CAS#569-61-9 = IARC Group 2B "Possibly carcinogenic to humans".

### 12. Ecological Information

**Ecotoxicity:** Phenol Toxicity to fish: LC50 - Leuciscus idus (golden orfe) - 14.00-25.00mg/L - 48h; LC50 - Carassius auratus (goldfish) - 36.10-68.80mg/l - 96h. Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 12.00 mg/l - 24h; EC100 - Daphnia magna (Water flea) - 100.00mg/l - 24h. Toxicity to algae: EC50 - Chlorella vulgaris (Fresh water algae) - 370.00 mg/L - 96h

**Persistence and degradability:** N/A

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):** N/A

**Mobility in the soil:** N/A

**Adverse Environmental Effects:** N/A

### 13. Disposal Considerations

**Recommended Disposal Containers:** Check with your local waste authorities\*

**Recommended Disposal Methods:** Do not dispose of in drains, check with your local waste authorities.\*

**Physical/Chemical Properties affecting Disposal:** See section 2 and section 9 applicable information.\*

**Special Precautions for Landfill and Incineration Activities:** Check with your local waste authorities.\*

**Waste Stream:** Consult your local or regional authorities.\*

### 14. Transport Information

**UN Number:** UN2821

**UN Proper Shipping Name:** Phenol Solutions

**Transport Hazard Class(es):** 6.1

**Packing Group Number:** III

**Environmental Hazards (IMDG code):**

**Marine Pollutant:** No

**Transport in Bulk (IBC Code):** N/A

**Special Transport Precautions:** Please refer to 49 CFR to see shipping regulations that differ for air, ground and excepted quantity non hazardous.

### 15. Regulatory Information

**OSHA:**

**DOT:**

**EPA:**

**CPSC:**



# Safety Data Sheet

## Carbol Fuchsin, Ziehl-Neelsen

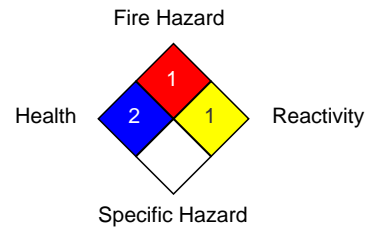
### 16. Other Information

Revision Date: 12/10/2014

#### NFPA

Health	2
Fire Hazard	1
Reactivity	1
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	

#### Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.



# Safety Data Sheet

## Methylene Blue Stock Solution

### 1. Identification

**Product Name:** Methylene Blue Stock Solution

**Item #:** SKC1096-250, SKC1096-500

**Web SDS:** S129

**Synonyms:** N/A

**Recommended Use:** Staining Solution

**Restrictions on Use:** Not a beverage

**Manufacturer:**

BBC Biochemical  
409 Eleanor Lane  
Mount Vernon, WA 98273  
1-800-635-4477

**In Case of Emergency:**

Chemtec US 1-800-424-9300  
Chemtec International 703-527-3887

### 2. Hazards Identification

**OSHA Hazard Classification(s):**

Skin Irritation - Category 2  
Eye Irritation - Category 2A  
Specific Target Organ Toxicity (single exposure) - Category 1  
Specific Target Organ Toxicity (repeated exposure) - Category 2  
Flammable Liquids - Category 2

**Signal Word:** Danger

**Hazard Statement(s):** Causes skin irritation. Causes serious eye irritation. Causes damage to organs (respiratory system). May cause damage to organs (respiratory system, central nervous system, liver, blood) through prolonged or repeated exposure. Highly flammable liquid and vapor.

**Pictogram(s):**



**Precautionary Statement(s):** Prevention: Wash body thoroughly after handling. Wear approved protective gloves made of neoprene, nitrile or equivalent. Wear approved eye protection/face protection. Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces.— No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Response: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed: Call a doctor. Get medical advice/attention if you feel unwell. In case of fire: Use water, dry chemical, carbon dioxide to extinguish.

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents in accordance with local regulations.

**Descriptions of Hazards not otherwise classified:** N/A

**Percent of mixture with unknown acute toxicity:** N/A

### 3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Denatured Ethanol Blend	Ethyl Alcohol Denatured	64-17-5	Trade Secret
Water		7732-18-5	Trade Secret
Methylene Blue		7220-79-3	Trade Secret

### 4. First Aid Measures

**Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.



# Safety Data Sheet

## Methylene Blue Stock Solution

Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** Vapor harmful. Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation eyes, nose, throat; headache, dizziness

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

### 5. Fire- Fighting Measures

**Extinguishing Media:** Dry chemical, carbon dioxide, alcohol foam.

**Fire Hazards (Chemical):** Vapors are flammable. Flammable Liquid OSHA Category 2

**Special Protective Equipment:** Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

### 6. Accidental Release Measures

**Emergency Procedures:** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

**Protective Equipment:** See section 8

**Environmental Precautions:** Prevent release to the environment by using barriers.

**Containment and Clean-Up Procedures:** Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

### 7. Handling and Storage

**Handling:** Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

**Storage:** Store locked up. Store in a well-ventilated place. Keep cool.

### 8. Exposure Controls/Personal Protection

#### OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Ethyl Alcohol	64-17-5	1000 ppm
Isopropyl Alcohol	67-63-0	400 ppm
Methyl Alcohol	67-56-1	200 ppm
Methyl Isobutyl Ketone	108-10-1	100 ppm

#### ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Ethyl Alcohol	64-17-5	1000 ppm	
Isopropyl Alcohol	67-63-0	400 ppm	500 ppm
Methyl Alcohol	67-56-1	200 ppm	250 ppm
Methyl Isobutyl Ketone	108-10-1	50 ppm	75 ppm

**Engineering Controls:** Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

**Personal Protective Measures:** Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

**Special PPE Requirements:** If ventilation hood not available wear respirator.



## Methylene Blue Stock Solution

### 9. Physical and Chemical Properties Section

**Appearance:** Dark Blue, Blue Liquid  
**Molecular Weight:** N/A  
**Molecular Formula:** N/A  
**pH:** N/A  
**Boiling Point and Boiling Range:** 173°F  
**Melting Point/Freezing Point:** N/A  
**Flash Point:** 55°F  
**Specific Gravity/Relative Density:** N/A  
**Odor:** Vinous  
**Odor Threshold:** N/A  
**Color:** Dark Blue  
**Flammability (solid/gas):** Flammable liquid, emits flammable vapors  
**Vapor Density:** N/A  
**Upper/Lower flammability or explosive limits:** N/A  
**Vapor Pressure:** N/A  
**Evaporation Rate:** N/A  
**Partition Coefficient: n-octanol/water:** N/A  
**Viscosity:** N/A  
**Auto-ignition temperature:** N/A  
**Solubility:** Miscible in water  
**Decomposition Temperature:** N/A

### 10. Stability and Reactivity

**Reactivity:**  
**Chemical Stability:** Stable  
**Conditions of Stability/Instability:** N/A  
**Stabilizers needed:** None  
**Safety issue indicated by appearance change:** N/A  
**Other:** N/A  
**Hazardous Reactions:** N/A  
**Hazardous Polymerization:** Does not occur  
**Conditions to avoid:** Heat source, open flame  
**Classes of Incompatible Materials:** Oxidizers, Strong Acids, Strong Bases, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium.  
**Hazardous Decomposition Products:** Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

### 11. Toxicological Information

#### Likely Routes of Exposure

**Eyes:** Irritation.

**Skin:** Irritation.

**Inhalation:** Dizziness, headache. may cause nausea and narcosis.

**Ingestion:** May cause blindness, nausea, damage to gastrointestinal tract, liver, kidneys and cardiovascular system. Carcinogenic if ingested repeatedly over time (IARC List 1 - Ethanol in alcoholic beverages)

**Signs or Symptoms of Exposure:** Irritation to the eyes, skin, nose. Headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects.

**Effects from short term exposure (delayed, immediate, chronic):** May cause blindness, nausea, damage to gastrointestinal tract, liver, kidneys and cardiovascular system





# Safety Data Sheet

## Methylene Blue Stock Solution

**Acute Toxicity (Numerical Measures):** N/A

**Carcinogenicity (NTP, IARC, OSHA):** If consumed Ethanol is considered a carcinogen. IARC List 1 - Ethanol in alcoholic beverages

### 12. Ecological Information

**Ecotoxicity:**

**Persistence and degradability:**

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):**

**Mobility in the soil:**

**Adverse Environmental Effects:**

### 13. Disposal Considerations

**Recommended Disposal Containers:** Check with your local waste authorities\*

**Recommended Disposal Methods:** Do not dispose of in drains, check with your local waste authorities.\*

**Physical/Chemical Properties affecting Disposal:** See section 2 and section 9 applicable information.\*

**Special Precautions for Landfill and Incineration Activities:** Check with your local waste authorities.\*

**Waste Stream:** Consult your local or regional authorities.\*

### 14. Transport Information

**UN Number:** UN1170

**UN Proper Shipping Name:** Ethanol

**Transport Hazard Class(es):** 3

**Packing Group Number:** II

**Environmental Hazards (IMDG code):**

**Marine Pollutant:** No

**Transport in Bulk (IBC Code):** N/A

**Special Transport Precautions:** N/A

### 15. Regulatory Information

**OSHA:**

**DOT:**

**EPA:**

**CPSC:**



# Safety Data Sheet

## Methylene Blue Stock Solution

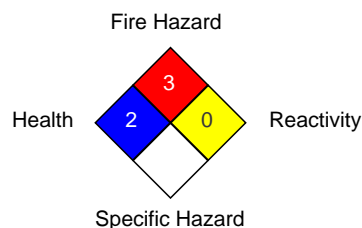
### 16. Other Information

Revision Date: 12/10/2014

#### NFPA

Health	2
Fire Hazard	3
Reactivity	0
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	

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# Safety Data Sheet

## Acid Alcohol, 1%

### 1. Identification

**Product Name:** Acid Alcohol, 1%

**Item #:** 3820, SKC1062-250, SKC1062-500  
S128

**Web SDS:**

**Synonyms:** N/A

**Recommended Use:** N/A

**Manufacturer:**

BBC Biochemical  
409 Eleanor Lane  
Mount Vernon, WA 98273  
1-800-635-4477

**Restrictions on Use:** Not a beverage.

**In Case of Emergency:**

Chemtrec US 1-800-424-9300  
Chemtrec International 703-527-3887

### 2. Hazards Identification

**OSHA Hazard Classification(s):**

Skin Irritation - Category 2

Eye Irritation - Category 2A

Specific Target Organ Toxicity (single exposure) - Category 1

Specific Target Organ Toxicity (repeated exposure) - Category 2

Flammable Liquids - Category 2

**Signal Word:** Danger

**Hazard Statement(s):** Causes skin irritation. Causes serious eye irritation. Causes damage to organs (respiratory system). May cause damage to organs (respiratory system, central nervous system, liver, blood) through prolonged or repeated exposure. Highly flammable liquid and vapor.

**Pictogram(s):**



**Precautionary Statement(s):** Prevention: Wash body thoroughly after handling. Wear protective gloves. Wear eye protection, face protection. Do not breathe dust, vapors. Do not eat, drink or smoke when using this product. Keep away from heat sources and open flame. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Response: If on skin: Wash with plenty of water. Specific treatment (see first aid section on this label). If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing If eye irritation persists: Get medical attention. If exposed or concerned: Call a doctor. Call a doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of fire: Use water, dry chemical, CO2 or foam to extinguish.

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local regulations.

**Descriptions of Hazards not otherwise classified:** N/A

**Percent of mixture with unknown acute toxicity:** N/A

### 3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Water		7732-18-5	Trade Secret
Etanol, Denatured		64-17-5	Trade Secret
Methyl Alcohol		67-56-1	Trade Secret
Isopropyl Alcohol		67-63-0	Trade Secret
Hydrochloric Acid (conc)		7647-01-0	Trade Secret



# Safety Data Sheet

## Acid Alcohol, 1%

### 4. First Aid Measures

**Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** Vapor harmful. Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

**Ingestion:** Poison. May be fatal or cause blindness if swallowed. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

**Symptoms:** Irritation eyes, nose, throat; headache, dizziness, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects.

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

### 5. Fire- Fighting Measures

**Extinguishing Media:** Dry chemical, carbon dioxide, alcohol foam, water. Use water spray to cool fire-exposed containers and disperse vapors.

**Fire Hazards (Chemical):** OSHA classified Flammable Liquid Category 2

**Special Protective Equipment:** Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters:** Carbon monoxide and unidentified organic compounds may be formed during combustion. Vapors can travel distances to ignition source and flash back. Cool fire exposed containers with water. Fine mist or spray may be flammable at temperatures below the flash point. When heated above the flash point this material emits flammable vapors which, when mixed with air, can burn or be explosive.

### 6. Accidental Release Measures

**Emergency Procedures:** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

**Protective Equipment:** See section 8

**Environmental Precautions:** Prevent release to the environment by using barriers.

**Containment and Clean-Up Procedures:** Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

### 7. Handling and Storage

**Handling:** Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

**Storage:** Store locked up. Store in a well-ventilated place. Keep cool.

### 8. Exposure Controls/Personal Protection

#### OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Ethyl Alcohol	64-17-5	1000ppm
Methyl Alcohol	67-56-1	200ppm
Isopropyl Alcohol	67-63-0	400ppm
Hydrochloric Acid (conc)	7647-01-0	5ppm

#### ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Ethyl Alcohol	64-17-5	1000ppm	1000ppm
Methyl Alcohol	67-56-1	200ppm	250ppm



# Safety Data Sheet

## Acid Alcohol, 1%

Isopropyl Alcohol	67-63-0	200ppm	400ppm
Hydrochloric Acid (conc)	7647-01-0	2ppm	

**Engineering Controls:** Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

**Personal Protective Measures:** Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

**Special PPE Requirements:** If ventilation hood not available wear respirator.

### 9. Physical and Chemical Properties Section

**Appearance:** Colorless, Liquid

**Molecular Weight:** N/A

**Molecular Formula:** N/A

**pH:** N/A

**Boiling Point and Boiling Range:** N/A

**Melting Point/Freezing Point:** N/A

**Flash Point:** N/A

**Specific Gravity/Relative Density:** N/A

**Odor:** Vinous odor

**Odor Threshold:** N/A

**Color:** Colorless

**Flammability (solid/gas):** Flammable liquid, emits flammable vapors

**Vapor Density:** N/A

**Upper/Lower flammability or explosive limits:** N/A

**Vapor Pressure:** N/A

**Evaporation Rate:** N/A

**Partition Coefficient: n-octanol/water:** N/A

**Viscosity:** N/A

**Auto-ignition temperature:** N/A

**Solubility:** Miscible in water.

**Decomposition Temperature:** N/A

### 10. Stability and Reactivity

**Reactivity:**

**Chemical Stability:** Stable

**Conditions of Stability/Instability:** Instable under conditions of heat or exposure to open flame/sparks.

**Stabilizers needed:** None

**Safety issue indicated by appearance change:** N/A

**Other:** N/A

**Hazardous Reactions:** N/A

**Hazardous Polymerization:** Does not occur

**Conditions to avoid:** Heat, open flame, sparks.

**Classes of Incompatible Materials:** Strong oxidizers, Potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium.

**Hazardous Decomposition Products:** Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide) may be released in a fire.

### 11. Toxicological Information

**Likely Routes of Exposure**



## Acid Alcohol, 1%

**Eyes:** Irritation.

**Skin:** Irritation.

**Inhalation:** Dizziness, headaches, nausea, narcosis.

**Ingestion:** Nausea. May cause blindness, damage to gastrointestinal tract, liver, kidneys and cardiovascular system. Carcinogenic if ingested repeatedly over time (IARC List 1-Ethanol in alcoholic beverages)

**Signs or Symptoms of Exposure:** Irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects.

**Effects from short term exposure (delayed, immediate, chronic):** May cause blindness, nausea, damage to gastrointestinal tract, liver, kidneys and cardiovascular system

**Acute Toxicity (Numerical Measures):** Ethyl Alcohol: LD50 (oral, mouse)= 3450 mg/kg, LC50(inhalation, mouse)=39000 mg/m<sup>3</sup>/4H;

Hydrochloric Acid: LD50(oral, rat)=900 mg/kg; LC50(inhalation, mouse)=1108 ppm/1H; LC50(inhalation, mouse)=3940 mg/m<sup>3</sup>/30M

**Carcinogenicity (NTP, IARC, OSHA):** Ethanol in alcoholic beverages is listed as IARC List 1 Carcinogenic to humans.

### 12. Ecological Information

**Ecotoxicity:** Ecotoxicity: CAS 7647-01-0 Hydrochloric Acid Fish: LC50 (96 Hr) Mosquito Fish: 282 mg/L LC100(24Hr) Trout: 10 mg/L Invertebrates: LC50(48Hr) Starfish: 100-330 mg/L LC50 (48Hr) Shrimp: 100-330 mg/L

**Persistence and degradability:** N/A

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):** N/A

**Mobility in the soil:** N/A

**Adverse Environmental Effects:** N/A

### 13. Disposal Considerations

**Recommended Disposal Containers:** Check with your local waste authorities\*

**Recommended Disposal Methods:** Do not dispose of in drains, check with your local waste authorities.\*

**Physical/Chemical Properties affecting Disposal:** See section 2 and section 9 applicable information.\*

**Special Precautions for Landfill and Incineration Activities:** Check with your local waste authorities.\*

**Waste Stream:** Consult your local or regional authorities.\*

### 14. Transport Information

**UN Number:** UN1170

**UN Proper Shipping Name:** Flammable Liquids, Corrosive, n.o.s., (Ethanol Solutions)

**Transport Hazard Class(es):** 3

**Packing Group Number:** II

**Environmental Hazards (IMDG code):**

**Marine Pollutant:**

**Transport in Bulk (IBC Code):**

**Special Transport Precautions:**

### 15. Regulatory Information

**OSHA:**

**DOT:**

**EPA:**

**CPSC:**



# Safety Data Sheet

## Acid Alcohol, 1%

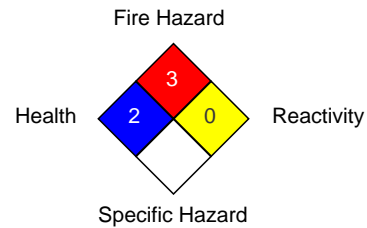
### 16. Other Information

Revision Date: 12/10/2014

#### NFPA

Health	2
Fire Hazard	3
Reactivity	0
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	

#### Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.