Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 11.19.2014

Ethanol Alcohol 95%, Lab Grade

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Ethanol Alcohol 95%, Lab Grade

Manufacturer/Supplier Article number: S25309

Recommended uses of the product and restrictions on use: Laboratory chemical

Manufacturer Details:

AquaPhoenix Scientific
860 Gitts Run Road,
Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
800 955-1177

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Flammable
Flammable liquids, category 2

Toxic
Acute toxicity (oral, dermal, inhalation), category 3

Health hazard
Reproductive toxicity, category 2
Specific target organ toxicity following repeated exposure, category 2

Irritant
Specific target organ toxicity following single exposure, category 3

Narcotic effects

Flammable Liquid 2.
Acute Toxicity 3 (oral).
Specific Target Organ Toxicity, Single Exposure 3.
Specific Target Organ Toxicity, Repeat Exposure 1.
Reproductive toxicity 2.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapour.
Toxic if swallowed.
May cause drowsiness or dizziness.
May damage fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.

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Precautionary statements:

If medical advice is needed have product container or label at hand.
Keep out of reach of children.
Read label before use.
Do not eat, drink or smoke when using this product.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Use personal protective equipment as required.
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/light/…/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of fire: Use … for extinction.
Rinse mouth.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Get Medical advice/attention if you feel unwell.
Collect spillage.
IF exposed or concerned: Get medical advice/attention.
Store in a well ventilated place. Keep cool.
Store locked up.
Store in a well ventilated place. Keep container tightly closed.
Dispose of contents/container.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 64-17-5	Ethanol	86 %
CAS 67-56-1	Methanol	4.5 %
CAS 67-63-0	Isopropyl Alcohol	4.5 %
CAS 7732-18-5	Deionized Water	5 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing is difficult, give oxygen.

After skin contact:

Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists. Rinse area with water for 10-15 minutes.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek immediate medical attention or advice.

After swallowing:

Rinse mouth thoroughly. Induce vomiting. Have exposed individual drink sips of water or milk. Seek immediate medical attention or advice.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. Dizziness. Vomiting. Impact to organs (liver, eyes, other-various). Impact to fetus (if pregnant).

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Note to physician: Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Water. Dry chemical. Foam. Carbon dioxide.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Dangerous fire hazard when exposed to heat, sparks and open flames.

Advice for firefighters:

Protective equipment:

Wear protective equipment. Use NIOSH-approved respiratory protection/breathing apparatus. Use spark-proof tools and explosion-proof equipment.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Avoid contact with skin and eyes, and clothing. Use spark-proof tools. Avoid contact with skin and eyes, and clothing. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Collect spilled liquid for recovery, treatment or disposal.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Empty containers can still be hazardous.

Reference to other sections: None

SECTION 7: Handling and storage

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Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas. Wash hands before breaks and at the end of work.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed. Store in secure flammable storage area away from sources of ignition. Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

Control parameters:

108-10-1, MIBK, ACGIH TLV STEL: 75 ppm.
64-17-5, Ethanol, NIOSH REL TWA: 1000 ppm (1900 mg/m³).
67-56-1, Methanol., OSHA PEL TWA: 260 mg/m³ (200 ppm).
67-56-1, Methanol., OSHA PEL STEL: 325 mg/m³ (250 ppm).
67-56-1, Methanol., ACGIH TLV TWA: 262 mg/m³.
67-56-1, Methanol., ACGIH TLV STEL: 328 mg/m³ (250 ppm).
108-10-1, MIBK, OSHA PEL TWA: 205 mg/m³ (50 ppm).
108-10-1, MIBK, OSHA PEL STEL: 300 mg/m³ (75 ppm).
108-10-1, MIBK, ACGIH TLV TWA: 20 mg/m³.
67-63-0, 2-Propanol, OSHA PEL TWA: 400 ppm (980 mg/m³).
67-63-0, 2-Propanol, NIOSH REL: TWA 400 ppm (980 mg/m³).
67-63-0, 2-Propanol, NIOSH REL ST: 500 ppm (1225 mg/m³).
67-63-0, 2-Propanol, ACGIH TLV TWA: 200 ppm.
67-63-0, 2-Propanol, ACGIH TLV STEL: 400 ppm.
64-17-5, Ethanol, ACGIH TLV TWA: 1000 ppm (1881mg/m3).
64-17-5, Ethanol, OSHA PEL: TWA 1000 ppm (1900 mg/m³).
64-17-5, Ethanol, NIOSH IDLH: 3300 ppm [10%LEL].

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

Protection of skin:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection:

Safety glasses with side shields or goggles.

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General hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	**Explosion limit lower**: **Explosion limit upper**:	3.3 18
Odor:	Alcohol	**Vapor pressure at 20°C**:	48 mm Hg
Odor threshold:	10 ppm	**Vapor density**:	1.5
pH-value:	Not determined	**Relative density**:	Approx. 0.8
Melting/Freezing point:	- 90 C	**Solubilities**:	infinite solubility
Boiling point/Boiling range:	77 C	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	15.5 C	**Auto/Self-ignition temperature**:	362.8 C
Evaporation rate:	3.6	**Decomposition temperature**:	Not determined
Flammability (solid, gaseous):	Flammable	**Viscosity**:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity: None

Chemical stability:

Stable under normal conditions of use and storage.

Possible hazardous reactions: None

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases. Ignition source. Excess heat. Incompatible materials. Open flame.

Incompatible materials:

Strong acids. Heat. Open flame. Sparks. Strong bases. Potassium dioxide. Acetyl bromide. Acetyl chloride. Bromine pentafluoride. Sodium. Platinum. Strong oxidizers.

Hazardous decomposition products:

Carbon oxides (CO, CO2). Acrid smoke and fumes. Irritating fumes.

SECTION 11: Toxicological information

Acute Toxicity: No additional information.

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation:

May cause eye irritation.

Respiratory or skin sensitization: No additional information.

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Carcinogenicity:

IARC: IARC classification (1) for Ethanol, CAS# 64-17-5, is intended for use in alcoholic beverage use only. This product is NOT intended for this use.

Germ cell mutagenicity: No additional information.
Reproductive Toxicity: No additional information.
STOT-single and repeated exposure:

Classified as STOT in Section 2 (multiple organs - see above, Section 11)

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity: No additional information.
Persistence and degradability:

Readily degradable in the environment.

Bioaccumulative potential: No additional information.
Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA 1170

Limited Quantity Exception: None

Bulk:
RQ (if applicable): None
Proper shipping Name: Ethanol (Mixture).
Hazard Class: 3
Packing Group: II.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Ethanol (Mixture).
Hazard Class: 3
Packing Group: II.
Marine Pollutant (if applicable): No additional information.
Comments: None

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SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute,Chronic,Fire,Reactive

SARA Section 313 (Specific toxic chemical listings):

67-56-1 Methanol.
67-63-0 2-Propanol.
108-10-1 MIBK.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

108-10-1 Methanol.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

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. Note. 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: 1-0-0
HMIS: 3-0-0

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GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
DOT	US Department of Transportation.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service (division of the American Chemical Society).
NFPA	National Fire Protection Association (USA).
HMIS	Hazardous Materials Identification System (USA).
WHMIS	Workplace Hazardous Materials Information System (Canada).
DNEL	Derived No-Effect Level (REACH).