

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015**1-2 Dichloroethane, ACS****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** 1-2 Dichloroethane, ACS**Manufacturer/Supplier Article number:** E175-500**Recommended uses of the product and restrictions on use:** Laboratory chemical**Manufacturer Details:**

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour) (US and Canada)
1-(800)-255-3924

SECTION 2: Hazards identification**Classification of the substance or mixture:****Flammable****Health hazard****Toxic**

Specific target organ toxicity - repeated exposure, category 2

Acute toxicity (oral), category 4

Acute toxicity (inhalation), category 3

Flammable liquids, category 2

Eye irritation, category 2A

Skin irritation, category 2

Carcinogenicity, category 2

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

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

Signal word: None**Hazard statements:**

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

May cause damage to organs through prolonged or repeated exposure.

May cause drowsiness or dizziness.

May cause respiratory irritation.

Suspected of causing cancer.

Harmful if swallowed.

Toxic if inhaled.

Precautionary statements:

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015**1-2 Dichloroethane, ACS**

Obtain special instructions before use.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Use only outdoors or in a well-ventilated area.
 Do not eat, drink or smoke when using this product.
 Wash skin thoroughly after handling.
 Do not handle until all safety precautions have been read and understood.
 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.
 If exposed or concerned: Get medical advice/attention.
 In case of fire, use agents recommended in section 5 for extinction.
 Get medical advice/attention if you feel unwell.
 If swallowed: Call a poison center or doctor/physician if you feel unwell.
 Rinse mouth.
 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 on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.
 If skin irritation occurs: Get medical advice/attention.
 Specific treatment (see supplemental first aid instructions on this label).
 Take off contaminated clothing and wash before reuse.
 Store in a well ventilated place. Keep container tightly closed.
 Store in a well ventilated place. Keep cool.
 Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None**SECTION 3: Composition/information on ingredients****Ingredients:**

Ingredients:		
CAS 107-06-2	Ethylene dichloride	>95 %
Percentages are by weight		

SECTION 4: First aid measures**Description of first aid measures****After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. 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:

Wash affected area with soap and water. Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek immediate medical attention or advice.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015**1-2 Dichloroethane, ACS**

lens(es) if able to do so during rinsing. Seek immediate medical attention or advice.

After swallowing:

If SWALLOWED: immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures**Extinguishing media****Suitable extinguishing agents:**

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

Unsuitable extinguishing agents:

Water may be ineffective.

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors. Vapors can flow across ignition source and flashback.

Advice for firefighters:**Protective equipment:**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Additional information (precautions):

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

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Ensure that air-handling systems are operational. Ensure adequate ventilation. Wear appropriate clothing to prevent any possibility of skin contact. Take precautionary measures against static discharges.

Environmental precautions:

Should not be released into environment.

Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Always obey local regulations. Absorb with suitable material and containerize for disposal. Remove all possible sources of ignition in the surrounding area. Refer to Section 8.

Reference to other sections: None**SECTION 7: Handling and storage****Precautions for safe handling:**

To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Use only under fume hood. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed. Store away from incompatible materials. Keep away from heat and direct sunlight.

SECTION 8: Exposure controls/personal protection

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015

1-2 Dichloroethane, ACS**Control parameters:**

107-06-2, Ethylene dichloride, OSHA PEL: 50 ppm; ACGIH TLV: 10 ppm.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Use only under fume hood. Use explosion-proof electrical/ventilating/lighting/equipment.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Protection of skin:

Select glove material impermeable and resistant to the substance. Contact glove manufacturer for specific information. Wear appropriate clothing to prevent any possibility of skin contact.

Eye protection:

Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Colorless liquid	Explosion limit lower:	6.2%
		Explosion limit upper:	15.9%
Odor:	sweet	Vapor pressure at 20°C:	65 mmHg @ 29 °C
Odor threshold:	Not determined	Vapor density:	3.4
pH-value:	Not applicable	Relative density:	1.250
Melting/Freezing point:	-35°C / -31°F	Solubilities:	Insoluble in water
Boiling point/Boiling range:	81 - 85°C / 177.8 - 185°F	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	13°C / 55.4°F	Auto/Self-ignition temperature:	440°C / 824°F
Evaporation rate:	6.5 (Butyl Acetate = 1.0)	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Flammable liquid	Viscosity:	a. Kinematic: Not determined b. Dynamic: 0.8 mPa s at 20 °C
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity**Reactivity:**

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015**1-2 Dichloroethane, ACS**

Incompatible Materials. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen chloride gas, Phosgene.**SECTION 11: Toxicological information****Acute Toxicity:****Dermal:**

LD50 - Rabbit - >2000 mg/kg Ethylene dichloride.

Chronic Toxicity: No additional information.**Skin corrosion/irritation:**

Irritating effect.

Serious eye damage/irritation:

Irritating effect.

Respiratory or skin sensitization: No additional information.**Carcinogenicity:** No additional information.**Germ cell mutagenicity:**

Mutagenic effects have occurred in humans.

Reproductive Toxicity:

Experiments have shown reproductive toxicity effects on laboratory animals.

STOT-single and repeated exposure:

STOT-Single exposure 3, Central nervous system

STOT-Single exposure Cat. 3, Respiratory irritation

Repeated exposure: Liver Kidney Blood.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information**Ecotoxicity:** No additional information.**Persistence and degradability:** No additional information.**Bioaccumulative potential:** No additional information.**Mobility in soil:** No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Dispose of empty containers as unused product. Product or containers must not be disposed with household

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015**1-2 Dichloroethane, ACS**

garbage. 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**US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

UN1184

Limited Quantity Exception:

E2.

Bulk:**RQ (if applicable):** YES.**Proper shipping Name:** ETHYLENE DICHLORIDE.**Hazard Class:** 3, 6**Packing Group:** II.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Non Bulk:****RQ (if applicable):** YES.**Proper shipping Name:** ETHYLENE DICHLORIDE.**Hazard Class:** 3, 6**Packing Group:** II.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):

107-06-2 Ethylene dichloride.

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):

107-06-2 Ethylene dichloride 100 lbs.

Proposition 65 (California):**Chemicals known to cause cancer:**

107-06-2 Ethylene dichloride.

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.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 08.20.2015**1-2 Dichloroethane, ACS****Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

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. 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. 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. 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.

NFPA: 2-0-0**HMIS:** 2-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:**

IMDG	International Maritime Code for Dangerous Goods.
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).
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.