

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 01.06.2015

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## Acetic Acid, Glacial, ACS Grade

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

**Product name:** Acetic Acid, Glacial, ACS Grade

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** S25118B

**Recommended uses of the product and restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Supplier Details:**

Fisher Science Education  
6771 Silver Crest Road, Nazareth, PA 18064  
(724)517-1954

**Emergency telephone number:**

**Fisher Science Education**  
Emergency Telephone No.: 800-535-5053

### SECTION 2: Hazards identification

**Classification of the substance or mixture:**



**Flammable**

Flammable liquids, category 3



**Corrosive**

Serious eye damage, category 1

Skin corrosion, category 1A

Flammable liq. 3.

Skin Corr. 1A.

Eye Damage. 1.

Acute toxicity, dermal. 4.

Acute toxicity, oral. 5.

Acute toxicity, inhalation. 3.

**Signal word:** Danger

**Hazard statements:**

Flammable liquid and vapour.

Causes severe skin burns and eye damage.

May be harmful if swallowed.

Toxic if inhaled.

Harmful in contact with skin.

**Precautionary statements:**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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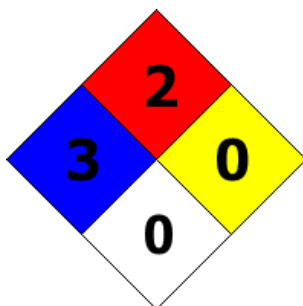
Wash skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Use only outdoors or in a well-ventilated area.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Use explosion-proof electrical/ventilating/light/equipment.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
Take off contaminated clothing and wash before reuse.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
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.  
Specific treatment (see supplemental first aid instructions on this label).  
In case of fire: Use agents recommended in section 5 for extinction.  
Store in a well ventilated place. Keep cool.  
Store locked up.  
Dispose of contents and container as instructed in Section 13.

### Other Non-GHS Classification:

#### WHMIS



#### NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	2
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

### SECTION 3: Composition/information on ingredients

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### Ingredients:

CAS 64-19-7

Acetic Acid, ACS

>90 %

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. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

##### After skin contact:

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

##### 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 medical attention if irritation persists or if concerned.

##### After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

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

Irritation. Nausea. Headache. Shortness of breath.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

### SECTION 5: Firefighting measures

#### Extinguishing media

##### Suitable extinguishing agents:

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

##### Unsuitable extinguishing agents: None

#### Special hazards arising from the substance or mixture:

Use water spray to cool unopened containers.

#### Advice for firefighters:

##### Protective equipment:

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. When necessary use NIOSH approved breathing equipment. Wear protective eyewear, gloves, and clothing. Refer to Section 8.

##### Additional information (precautions):

Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Remove all sources of ignition.

### SECTION 6: Accidental release measures

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

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove from all sources of ignition.

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### Environmental precautions:

Prevent from reaching drains, sewer or waterway. Do not let product enter drains.

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

If necessary, use trained response staff/contractor. Absorb with suitable absorbent material such as sand or earth and containerize for disposal. Dispose of empty containers as unused product. Refer to Section 13. Soak with inert material. Use spark-proof tools and explosion-proof equipment.

Reference to other sections: None

## SECTION 7: Handling and storage

### Precautions for safe handling:

Take measures to prevent the build up of electrostatic charge. Follow advice and precautions. Refer to Section 5. Use under a chemical fume hood. Use explosion-proof equipment. Wash hands after handling. Avoid contact with skin and eyes. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas. Do not inhale gases, fumes, dust, mist, vapor, and aerosols. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Keep away from open flames, hot surfaces, and sources of ignition.

### 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. Keep container tightly sealed. Store with like hazards. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## SECTION 8: Exposure controls/personal protection



### Control Parameters:

64-19-7, Acetic acid , ACGIH TLV: 25mg/m3.  
64-19-7, Acetic acid , OSHA PEL: 25mg/m3.

### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area. Use chemical fume hood. Use explosion-proof equipment.

### Respiratory protection:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present.

### Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.

### Eye protection:

Safety goggles with face shield.

### General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Perform routine housekeeping. Follow proper handling methods. Refer to Section 6. Follow proper handling methods. Refer to Section 7.

## SECTION 9: Physical and chemical properties

<b>Appearance (physical state, color):</b>	Clear colorless liquid	<b>Explosion limit lower:</b>	4 %
<b>Odor:</b>	Pungent Vinegar	<b>Explosion limit upper:</b>	19.9 %
<b>Odor threshold:</b>	Not Available	<b>Vapor pressure at 20°C:</b>	1.52 kPa @ 20C
		<b>Vapor density:</b>	2.1

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<b>pH-value:</b>	2.4 @ 60.05 g/l	<b>Relative density:</b>	1.049 g/cm <sup>3</sup> at 25 °C
<b>Melting/Freezing point:</b>	16.2°C	<b>Solubilities:</b>	Completely soluble.
<b>Boiling point/Boiling range:</b>	117 - 118°C	<b>Partition coefficient (n-octanol/water):</b>	log Pow: -0.17
<b>Flash point (closed cup):</b>	40°C	<b>Auto/Self-ignition temperature:</b>	485.0°C
<b>Evaporation rate:</b>	Not Available	<b>Decomposition temperature:</b>	Not Available
<b>Flammability (solid, gaseous):</b>	Not Available	<b>Viscosity:</b>	a. Kinematic: Not Available b. Dynamic: Not Available
<b>Density at 20°C:</b>	Not Available		

### 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:

Moisture sensitive. Heat, flames and sparks. Incompatible Materials.

#### Incompatible materials:

Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, Permanganates, Potassium permanganate, Amines, Alcohols, and Nitric acid. Strong bases, strong oxidizers, metals.

#### Hazardous decomposition products:

Oxides of carbon.

### SECTION 11: Toxicological information

#### Acute Toxicity:

##### Oral:

LD50 Rat: 3,310 mg/kg

##### Dermal:

LD50 Rabbit: 1,112 mg/kg

##### Inhalation:

LC50 Rat: 11.4 mg/l - 4 h

**Chronic Toxicity:** No additional information.

**Corrosion Irritation:**

##### Ocular:

Eyes - rabbit Result: Corrosive to eyes

**Sensitization:** No additional information.

**Numerical Measures:** No additional information.

**Carcinogenicity:** No additional information.

**Mutagenicity:** No additional information.

**Reproductive Toxicity:**

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Experiments have shown reproductive toxicity effects on laboratory animals.

### SECTION 12: Ecological information

#### Ecotoxicity:

Aquatic Tox.: Toxicity to fish semi-static test LC50 - *Oncorhynchus mykiss* (rainbow trout) - > 1,000 mg/l - 96 h (OECD Test Guideline 203)

Aquatic Tox.: Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - > 300.82 mg/l - 48 h (OECD Test Guideline 202)

#### Persistence and degradability:

Readily biodegradable.

**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:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

### SECTION 14: Transport information

#### US DOT

##### UN Number:

ADR, ADN, DOT, IMDG, IATA 2789

**Limited Quantity Exception:** None

##### Bulk:

**RQ (if applicable):** None

**Proper shipping Name:** Acetic acid, glacial.

**Hazard Class:** 8

**Packing Group:** II.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

##### Non Bulk:

**RQ (if applicable):** None

**Proper shipping Name:** Acetic acid, glacial.

**Hazard Class:** 8

**Packing Group:** II.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None



### SECTION 15: Regulatory information

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### United States (USA)

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

Acute, Chronic, Fire

#### SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

#### 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):

64-19-7 Acetic Acid 5000 lb.

### 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:

None of the ingredients are listed.

### Canada

#### Canadian Domestic Substances List (DSL):

All ingredients are listed.

#### Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

#### Canadian NPRI Ingredient Disclosure list (limit 1%):

64-19-7 Acetic Acid.

## 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.

**GHS Full Text Phrases:** None

**Abbreviations and Acronyms:**

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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).

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**Last updated:** 05.28.2015