according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

1 Identification

· Product identifier

· Trade name: <u>Acetic Acid 10 vv</u> · Product code: AA2190SS

Recommended use and restriction on use
 Recommended use: Laboratory chemicals

· Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291 info@aquaphoenixsci.com

Distributor:

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

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



GHS07

· Signal word: Warning

· Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary statements:

P234 Keep only in original container. P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection.

P302+P352 If on skin: Wash with plenty of water.

(Cont'd. on page 2)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 1)

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Get medical advice/attention.
Absorb spillage to prevent material damage.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:		
7732-18-5	Water	90%
64-19-7	Acetic acid	10%
	Flam. Liq. 3, H226 Met. Corr.1, H290; Skin Corr. 1A, H314	

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Rinse with warm water.

If skin irritation continues, consult a doctor.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

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

Nausea in case of ingestion.

Gastric or intestinal disorders when ingested.

Acidosis

Irritating to eyes and skin.

- Danger: No relevant information available.
- Indication of any immediate medical attention and special treatment needed:

Medical supervision for at least 48 hours.

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

5 Fire-fighting measures

(Cont'd. on page 3)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 2)

- Extinguishing media
- Suitable extinguishing agents:

The product is not flammable.

Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

- Environmental precautions Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up

Use limestone to neutralize and/or absorb spill.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- Precautions for safe handling:

Avoid splashes or spray in enclosed areas.

Prevent formation of aerosols.

Use only in well ventilated areas.

- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Store only in the original receptacle.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with alkalis (caustic solutions).

Store away from metals.

Store away from oxidizing agents.

· Further information about storage conditions: Keep containers tightly sealed.

(Cont'd. on page 4)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 3)

· **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

64-19-7 Acetic acid		
PEL (USA)	Long-term value: 25 mg/m³, 10 ppm	
REL (USA)	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm	
TLV (USA)	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm	
EL (Canada)	Short-term value: 15 ppm Long-term value: 10 ppm	
EV (Canada)	Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm	
LMPE (Mexico)	Short-term value: 15 ppm Long-term value: 10 ppm	

Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Avoid breathing mist, vapors, or spray.

- Engineering controls: Provide adequate ventilation.
- Breathing equipment: Use suitable respiratory protective device when high concentrations are present.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Neoprene gloves

Natural rubber, NR

Fluorocarbon rubber (Viton)

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

(Cont'd. on page 5)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 4)



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Acid resistant protective clothing.
- Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

9 Physical and chemical properties				
Information on basic physical a	and chemical properties			
Form:	Liquid			
Color:	Colorless			
· Odor:	Characteristic			
· Odor threshold:	Not determined.			
· pH-value:	Not determined.			
· Melting point/Melting range:	Not determined.			
· Boiling point/Boiling range:	>100 °C (>212 °F)			
· Flash point:	The product is not flammable.			
· Flammability (solid, gaseous):	Not applicable.			
· Auto-ignition temperature:	Not determined.			
· Decomposition temperature:	Not determined.			
· Danger of explosion:	Product does not present an explosion hazard.			
· Explosion limits				
Lower:	Not determined.			
Upper:	Not determined.			
· Oxidizing properties:	Not determined.			
· Vapor pressure:	Not determined.			
Density:				
Relative density:	1			
Vapor density:	Not determined.			
Evaporation rate:	Not determined.			
· Solubility in / Miscibility with				
Water:	Fully miscible.			
Partition coefficient (n-octanol/wa	ter): Not determined.			
· Viscosity				
Dynamic:	Not determined.			
Kinematic:	Not determined.			
· Other information	No relevant information available.			

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 5)

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Reacts with alkali (lyes).

Reacts with certain metals.

Reacts with strong oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

- · Conditions to avoid No relevant information available.
- Incompatible materials

Alkalis.

Metals.

Strong oxidizers such as perchlorates, bromates, and nitrates; hydrofluoric acid.

· Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- · On the eye: Causes serious eye irritation.
- · Sensitization: Based on available data, the classification criteria are not met.
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): Irritating to eyes and skin.
- · Repeated dose toxicity: No relevant information available.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

Page: 7/9

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 6)

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- Additional ecological information
- · General notes:

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

• Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

8

- Uncleaned packagings
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- · UN-Number
- · DOT, ADR/RID/ADN, IMDG, IATA UN2790
- · UN proper shipping name
- · **DOT** Acetic acid solution
- · ADR/RID/ADN, IMDG, IATA ACETIC ACID SOLUTION
- Transport hazard class(es)
- · DOT



- · Class
- · Label 8

(Cont'd. on page 8)

Page: 8/9

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 7) · ADR/RID/ADN · Class 8 (C3) · Label · IMDG. IATA 8 · Class · Label 8 · Packing group · DOT, ADR/RID/ADN, IMDG, IATA Ш · Environmental hazards · Marine pollutant: No Special precautions for user Warning: Corrosive substances · Hazard identification number (Kemler code): · EMS Number: F-A,S-B · Segregation groups Acids Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

64-19-7 Acetic acid 7732-18-5 Water

· Proposition 65 (California)

· Chemicals known to cause cancer:

None of the ingredients are listed.

(Cont'd. on page 9)

Page: 9/9

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: April 19, 2020

Trade name: Acetic Acid 10 vv

(Cont'd. of page 8)

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Flam. Liq. 3: Flammable liquids - Category 3

Met. Corr.1: Corrosive to metals - Category 1

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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