



# SAFETY DATA SHEET

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Revision Number: 1

**SECTION 1 Identification****1.1. Product Identifier**

Trade Name or Designation: Acetic Acid 50% V/V

Product Number: APS15007

**1.2. Recommended Use and Restrictions on Use**

General Laboratory Reagent

**1.3. Details of the Supplier of the Safety Data Sheet****Dawn Scientific Inc**

121 Liberty Street, Metuchen, NJ, 08840

Tel : 732-902-6300 | Fax : 973-802-1005

sales@dawnscientific.com | www.dawnscientific.com

**1.4. Emergency Telephone Number (24 hours)**

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS US classification**

Skin corrosion/irritation Category 1B

Serious eye damage/eye irritation Category 1

Hazardous to the aquatic environment - Acute Hazard Category 3

Full text of H statements : see section 16

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H402 Harmful to aquatic life

**2.2. GHS Label elements, including precautionary statements****GHS US labeling**

Hazard pictograms (GHS US)

:



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H314 - Causes severe skin burns and eye damage

H402 - Harmful to aquatic life

Precautionary statements (GHS US)

: P260 - Do not breathe mist, vapors, spray.  
P264 - Wash exposed skin thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, eye protection.  
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a poison center or doctor/physician.  
P363 - Wash contaminated clothing before reuse.  
P405 - Store locked up.  
P501 - Dispose of contents/container to comply with local, state and federal regulations.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.

**2.3. Other hazards which do not result in classification**

Other hazards not contributing to the classification

: None.

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Water	(CAS-No.) 7732-18-5	50.4	Not classified
Acetic Acid	(CAS-No.) 64-19-7	49.6	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment	: Safety glasses. Gloves.
Emergency procedures	: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

## 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

## 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash exposed skin thoroughly after handling.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.

Incompatible products : Strong bases. Strong oxidizers. metals.

Incompatible materials : Sources of ignition. Direct sunlight.

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

<b>Acetic Acid, 2% v/v (1+49)</b>	
No additional information available	
<b>Acetic Acid (64-19-7)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Acetic acid
ACGIH OEL TWA	25 mg/m <sup>3</sup>
ACGIH OEL TWA [ppm]	10 ppm
ACGIH STEL (mg/m <sup>3</sup> )	37 mg/m <sup>3</sup>
ACGIH STEL (ppm)	15 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; pulm func
Regulatory reference	ACGIH 2020
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Acetic acid
OSHA PEL (TWA) [1]	25 mg/m <sup>3</sup>
OSHA PEL (TWA) [2]	10 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH [ppm]	50 ppm
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL (TWA)	25 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	10 ppm
NIOSH REL (STEL)	37 mg/m <sup>3</sup>
NIOSH REL STEL [ppm]	15 ppm
<b>Water (7732-18-5)</b>	
No additional information available	

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

## 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Safety glasses.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Respiratory protection:

Respiratory protection not required in normal conditions

### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: Vinegar odour
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 1 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 1.04 mm <sup>2</sup> /s
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong oxidizers. Strong bases. metals.

### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Acetic Acid, 2% v/v (1+49)	
LD50 oral rat	50597 mg/kg
ATE US (oral)	50597 mg/kg body weight
Acetic Acid (64-19-7)	
LD50 oral rat	3310 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 6 day(s))

Acetic Acid (64-19-7)	
LC50 Inhalation - Rat	11.4 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	3310 mg/kg body weight
ATE US (vapors)	11.4 mg/l/4h
ATE US (dust, mist)	11.4 mg/l/4h

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
ATE US (oral)	90000 mg/kg body weight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : 1.04 mm<sup>2</sup>/s

Likely routes of exposure : Inhalation. Skin and eye contact.

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Acetic Acid (64-19-7)	
LC50 fish 1	> 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	> 1000 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

### 12.2. Persistence and degradability

Acetic Acid, 2% v/v (1+49)	
Persistence and degradability	Not established.
Acetic Acid (64-19-7)	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.6 – 0.74 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.03 g O <sub>2</sub> /g substance
ThOD	1.07 g O <sub>2</sub> /g substance
Water (7732-18-5)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Acetic Acid, 2% v/v (1+49)	
Bioaccumulative potential	Not established.
Acetic Acid (64-19-7)	
BCF fish 1	3.16 (Pisces, Fresh water, QSAR)
Log Pow	-0.17 (Experimental value, 25 °C)
Acetic Acid (64-19-7)	
Bioaccumulative potential	Not bioaccumulative.
Water (7732-18-5)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

Acetic Acid (64-19-7)	
Surface tension	26.3 mN/m (30 °C)
Ecology - soil	Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation.

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transport by sea (IMDG)

Not regulated

### Air transport (IATA/ICAO)

Not regulated

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Acetic Acid (64-19-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Acute toxicity (any route of exposure)
Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. International regulations

#### CANADA

Acetic Acid (64-19-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Water (7732-18-5)	
Listed on the Canadian DSL (Domestic Substances List)	

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

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Revision date : 01/01/2019  
Other information : None.

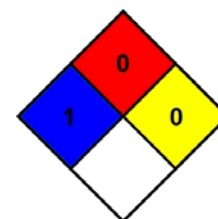
Full text of H-phrases: see section 16:

H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H402	Harmful to aquatic life

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



#### Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B

B - Safety glasses, Gloves

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and Dawn Scientific Inc assumes no legal responsibility or liability whatsoever resulting from its use.