

Safety Data Sheet

1. IDENTIFICATION:

Product Name: ACETIC ACID SOLUTION

Synonyms: N/A

CAS Number: Mixture

Catalog Numbers: 10162 W2T12259 U29141

Product Use: Analytical / Laboratory Reagent

Manufacturer: HF Scientific, Inc

Address: 3170 Metro Parkway Fort Myers, FL 33916

General Information: 888-203-7248

Transportation Emergency Number: CHEMTREC® 24 hr US 800-424-9300


CHEMTREC® 24 hr International 703-527-3887

2. HAZARDS IDENTIFICATION

GHS Classification

Health	Environmental	Physical
Acute toxicity: Category 4 Skin irritation: Category 2 Eye irritation: Category 2A Specific target organ toxicity following single exposure: Category 3	Aquatic toxicity: None	Flammable: No

GHS Label

Pictogram:	Signal Word:
	WARNING
Hazard Statements: Harmful If swallowed Harmful in contact with skin Harmful if inhaled Causes skin irritation Causes serious eye irritation May cause respiratory irritation	Precautionary Statements IF SWALLOWED do not induce vomiting and seek medical attention. Give milk, water containing milk of magnesia or olive oil. IF ON SKIN remove contaminated cloth and flush the area with copious amount of water for 15 minutes. IF INHALED move patient to uncontaminated atmosphere and seek medical attention. IF IN EYES flush gently with copious amount of water for 15 minutes using fingers to separate eyelids and assure the irrigation of the eye. Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Cas Number	Weight %
Water	7732-18-5	54%
Glacial Acetic Acid	64-19-7	46%

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes gently with copious quantities of water for a minimum of 15 minutes. Use fingers to assure that eyelids are separated and the eye is being irrigated. Call a physician.

Skin Contact: Remove contaminated clothing. Flush contaminated area with copious quantities of water for 15 minutes. Call a physician.

Inhalation: Move patient immediately to uncontaminated atmosphere. Except in minor of exposure without symptoms, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention promptly. If vomiting occurs, take steps to avoid aspiration of vomited material into the respiratory tract. To prevent choking, position body so that material is freely ejected. Give milk, water containing milk of magnesia or olive oil.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, dry chemical, alcohol foam or water fog.

Fire Fighting Procedures: Wear self contained breathing apparatus for fire fighting if necessary.

Unusual Fire and Exposure Hazards: N/A

Combustion Products: Produces carbon monoxide if burned with limited air.

NFPA Classification HEALTH: 2 FLAMMABLE: 1 REACTIVITY: 1

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Use water spray to dilute spill to a nonflammable mixture. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Use non-sparking tools and equipment. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. HANDLING AND STORAGE

Handling: Protect against physical damage. Wash well after handling. Avoid breathing vapors.

Storage: Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Protect from freezing. Store above 17°C (63°F). Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 10 ppm (TWA)

ACGIH Threshold Limit Value (TLV): 10 ppm (TWA) ; 15 ppm (STEL)

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Protective Equipment:

Eyes: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory: If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flashpoint: 104°F

Autoignition Temperature: 801°F

Boiling Point: 118°F

Melting Point: 16.6°C

Vapor Pressure: 11 mmHg @ 20°C

Vapor Density: 2.1

% Solubility in Water: Infinitely soluble

Pour Point: N/A

Molecular Formula: Mixture

Odor / Appearance: Colorless liquid with a strong vinegar like odor

Lower Flammability Limit: 4.0%

Upper Flammability Limit: 16.0%

Specific Gravity: 1.05

% Volatile: N/A

Evaporation Rate (Water=1): 0.97

Viscosity: N/A

Octanol / Water Partition Coefficient: N/A

pH: 2.4 (1.0M Solution)

Molecular Weight: Mixture

10. STABILITY AND REACTIVITY

Stability / Incompatibility: Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability. Acetic Acid is incompatible with chromic acid, nitric acid, ethylene glycol, perchloric acid, phosphorous trichloride, oxidizers, sodium peroxide, strong caustics, most metals (except aluminum), carbonates, hydroxides, oxides, and phosphates.

Hazardous Reactions / Decomposition Products: Produces carbon monoxide if burned with limited air. Hydrogen may be generated by the action on metals. Hazardous Polymerization will not occur.

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11. TOXICOLOGICAL INFORMATION

Symptoms of Overexposure: Irritation of eyes, skin, respiratory and gastrointestinal tract.

Acute Effects: Irritation of eyes, skin, respiratory and gastrointestinal tract.

Eye Contact: Irritation of eyes

Skin Contact: irritation of skin.

Inhalation: Irritation of respiratory tract.

Ingestion: irritation of gastrointestinal tract

Target Organs Effects: All body tissue

Chronic Effects: Repeated or prolonged exposures may cause chronic inflammation of the nose, throat, and bronchial tubes. Inhalation can cause lung and tooth damage.

Medical Conditions Aggravated by Exposure: No information found

Acute Toxicity Values: N/A

12. ECOLOGICAL INFORMATION

Environmental Fate: When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into water, this material is expected to readily biodegrade. When released into the water, this material is expected to have a half-life between 1 and 10 days. Standard dilution BOD5/TOD = 58% When released into the soil, this material is expected to readily biodegrade. This material is not expected to significantly bioaccumulate. This material has an estimated bioconcentration factor (BCF) of less than 100

Environmental Toxicity: This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

US DOT (United States Department of Transportation):

Proper Shipping Name: Acetic Acid Solution

UN Identification: UN 2790

Hazard Class: 8

PG: III

Special Provision: IB3, T4, TP1

IATA (International Air Transport Association):

Proper Shipping Name: Acetic Acid Solution

UN Identification: UN 2790

Hazard Class: 8

PG: III

IMO (International Maritime Organization):

Proper Shipping name: Acetic Acid Solution

UN Identification: UN 2790

Hazard Class: 8

PG: III

15. REGULATORY INFORMATION

CERCLA: 5000

SARA/Title III: No

TSCA Inventory: No

Cal. Proposition 65: No

WHMIS: B3, E, disclosure at .01% according to classification

DSL: Yes

NDSL: No

16. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. ALL PRODUCTS ARE OFFERED IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT PRODUCTION SPECIFICATIONS AND ARE INTENDED SOLELY FOR USE IN ANALYTICAL TESTING. THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE RESULTING FROM THE HANDLING, USE OR MISUSE OF THESE PRODUCTS.