



Prairie Mud Service

Fluid Solutions Thru Experience and Technology

ACETIC ACID 60% SAFETY DATA SHEET

Revision Date: May 8, 2020

Review Date: April 27, 2021

1. IDENTIFICATION

Product identifier

Product Name ACETIC ACID 60%

Other means of identification

SDS Number SDS00842

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Solvent

Restricted Uses No information available

Initial Supplier Identifier

Prairie Mud Service
738 6th Street
Estevan, SK S4A 1A4
(306) 634-3411

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 1
Sub-category A	
Serious eye damage/eye irritation	Category 1

Label elements

Hazard pictograms



Signal Word: Danger

Hazard statements

Harmful in contact with skin
Causes severe skin burns and eye damage

Precautionary Statements

Prevention

Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling

Response

IF exposed or concerned: Call a POISON CENTER or doctor
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
IF INHALED: Remove person to fresh air and keep comfortable for breathing
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-% (W/W)	Synonyms
Acetic Acid	64-19-7	45 - 70%	Acetic Acid
Water	7732-18-5	30 - 60%	Water

Notes:

The actual percentage concentration has been withheld as a trade secret.

4. FIRST-AID MEASURES

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed:

Causes severe eye burns. Symptoms of exposure may include; nasal discharge, hoarseness, coughing, chest pain and breathing difficulty. Accumulation of fluid in the lungs (pulmonary edema) may occur. May cause permanent eye damage. Symptoms of exposure may include: eye irritation, burning sensation, pain, watering and/or change of vision. Causes digestive tract burns Symptoms of exposure may include: Inflammation of mouth, throat, esophagus and/or stomach. Nausea, vomiting, loss of appetite, gastrointestinal irritation and/ or diarrhea. Harmful if absorbed through the skin. Causes burns Symptoms of exposure may include: Redness or discoloration, swelling, itching, burning or blistering of skin. Prolonged or repeated contact may cause skin sensitization.

Indication of any immediate medical attention and special treatment needed:

Note to physicians

Treatment based on sound judgment of physician and individual reactions of patient. Observe for pulmonary edema.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use DRY chemicals, CO₂, alcohol foam or water spray.

Specific hazards arising from the substance or mixture

Stay upwind. Isolate and restrict area access. Stop leak only if safe to do so. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure build-up which could result in container rupture. Water run-off and vapor cloud may be corrosive. Dike and collect water used to fight fire for neutralization before release. Water streams should not be directed to the liquid, as this will cause the liquid to boil and generate more vapor. Water may be used to flush spills away from fire exposures and to dilute spills to non-flammable mixtures.

Hazardous combustion products

Toxic fumes. Irritating vapors. Oxides of carbon.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling

Corrosive. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Wash thoroughly after handling. Keep the containers closed when not in use. Protect from freezing. Do not cut, drill, grind, weld or perform similar operations on or near containers. Empty containers may contain hazardous product residues. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. Handle and open containers with care.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store in a cool, dry, well ventilated area, away from heat and ignition sources. Place away from incompatible materials. Store in accordance with good industrial practices. Store out of direct sunlight and on an impermeable floor.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Acetic Acid 64-19-7	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	15 ppm STEL 10 ppm TLV-TWA	50 ppm
Water 7732-18-5	Not available	Not available	Not available	Not available	Not available	Not available

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls

Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Hand protection

Appropriate chemical resistant gloves should be worn. Neoprene gloves.

Skin and body protection

Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory protection

Based on workplace contaminant level and working limits of the respirator, use a respirator approved by NIOSH. The following is the minimum recommended equipment for an occupational exposure level.

For concentrations > 1 and < 10 times the occupational exposure level: Use air-purifying respirator with full facepiece and organic vapor cartridge(s) or air-purifying full facepiece respirator with an organic vapor canister or a full facepiece powered air-purifying respirator fitted with organic vapor cartridge(s). The air purifying element must have an end of service life indicator, or a documented change out schedule must be established. Otherwise, use supplied air.

For concentrations more than 10 times the occupational exposure level and less than the lower of either 100 times the occupational exposure level or the IDLH: Use Type C full facepiece supplied-air respirator operated in positive-pressure or continuous-flow mode.

For concentrations > 100 times the occupational exposure level or greater than the IDLH level or unknown concentrations (such as in emergencies): Use self-contained breathing apparatus with full facepiece in positive-pressure mode or Type C positive-pressure full facepiece supplied-air respirator with an auxiliary positive-pressure self-contained breathing apparatus escape system.

For escape: Use self-contained breathing apparatus with full facepiece or any respirator specifically approved for escape.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Colorless
Odor	Strong ACRID VINEGAR SMELL
Odor threshold	No information available

PROPERTIES

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2.4 (60 g/l)	
Melting point / freezing point	-27 °C / -16 °F	
Initial boiling point/boiling range	117 °C / 243 °F	
Flash point	>93.3 °C / >200 °F	Closed cup.
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit:	19.9	
Lower flammability limit:	4	

Vapor pressure	20.79 hPa (25°C)	
Relative vapor density	2.1	
Specific Gravity	1.0446 (25°C)	
Water solubility	Completely soluble	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	463 °C / 865 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	Dynamic: 1.056 mPa.s (25°C); Kinematic 1.011 mm ² /s	
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Molecular weight	No information available	
VOC Percentage Volatility	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability

Stable

Possibility of hazardous reactions

No additional remark.

Hazardous polymerization

Will not occur.

Conditions to avoid

Avoid excessive heat, open flames and all ignition sources.

Incompatible materials

Strong oxidizing agents. Strong alkalis. Aldehydes. Ammonium nitrate. Carbonates. Oxides. Common metals and their alloys. Hydroxides. Perchloric acid. Phosphates. Sodium peroxide.

Hazardous decomposition products

Toxic fumes. Irritating vapors. Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

Symptoms of exposure may include; nasal discharge, hoarseness, coughing, chest pain and breathing difficulty. Accumulation of fluid in the lungs (pulmonary edema) may occur.

Eye contact

Causes severe eye burns. May cause permanent eye damage. Symptoms of exposure may include: eye irritation, burning sensation, pain, watering and/or change of vision.

Skin contact

Harmful if absorbed through the skin. Causes burns. Symptoms of exposure may include: Redness or discoloration, swelling, itching, burning or blistering of skin. Prolonged or repeated contact may cause skin sensitization.

Ingestion

Causes digestive tract burns. Symptoms of exposure may include: Inflammation of mouth, throat, esophagus and/or

stomach. Nausea, vomiting, loss of appetite, gastrointestinal irritation and/ or diarrhea.

Information on toxicological effects

Symptoms

Overexposure (prolonged or repeated exposure) may cause: injury to the eyes, digestive tract damage, respiratory tract damage, skin damage.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5,517.00 mg/kg

ATEmix (dermal) 1,767.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic Acid 64-19-7	= 3310 mg/kg (Rat)	= 1060 mg/kg (Rabbit)	= 11.4 mg/L (Rat) 4 h
Water 7732-18-5	> 90 mL/kg (Rat)	Not available	Not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Harmful if absorbed through the skin. Causes burns. Symptoms of exposure may include: Redness or discoloration, swelling, itching, burning or blistering of skin. Prolonged or repeated contact may cause skin sensitization.

Serious eye damage/eye irritation

Causes severe eye burns. May cause permanent eye damage. Symptoms of exposure may include: eye irritation, burning sensation, pain, watering and/or change of vision.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Acetic Acid 64-19-7	Not available	Not available	Not available	Not available
Water 7732-18-5	Not available	Not available	Not available	Not available

Reproductive toxicity

Mixed results in vitro (negative in the Ames and Chinese hamster ovary assay; positive in human lymphocytes for SCEs and in some DNA damage assays). The positive results are thought to be due to artifacts caused by acidification of the culture media.

Specific target organ systemic toxicity - single exposure

No information available.

Specific target organ systemic toxicity - repeated exposure

No information available.

Aspiration hazard

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Acetic Acid 64-19-7	Not available	75 mg/L LC50 (Lepomis macrochirus) 96 h static 79 mg/L LC50 (Pimephales promelas) 96 h static	Not available	EC50: =47mg/L (24h, Daphnia magna) EC50: =65mg/L (48h, Daphnia magna)
Water 7732-18-5	Not available	Not available	Not available	Not available

Persistence and degradability No information available.

Bioaccumulation No information available.

Component Information

Chemical Name	Partition coefficient
Acetic Acid 64-19-7	-0.31
Water 7732-18-5	Not available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number UN2790
Shipping name ACETIC ACID SOLUTION
Class 8
Packing Group II
Marine pollutant Not available.

DOT (U.S.)

UN Number UN2790
Shipping name ACETIC ACID SOLUTION
Class 8
Packing Group II
Marine pollutant Not available

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Regulatory Rules

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Acetic Acid - 64-19-7	Not Listed	Listed	Not Listed
Water - 7732-18-5	Not Listed	Not Listed	Not Listed

International Inventories

TSCA

All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

DSL/NDSL

All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION

NFPA:	Health hazards 3	Flammability 1	Instability 0	Physical and chemical properties -
HMIS:	Health hazards 3	Flammability 1	Physical hazards 0	Personal protection X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

REVISION DATE:

May 8, 2020

This product's health and safety information is provided to assist our customers in assessing compliance with Health, Safety and Environmental regulations. The information contained herein is based on data available to us, and is believed to be accurate, although no guarantee or warranty is provided or implied by the company in this respect. Since the use of this product is within the exclusive control of the user, it is the user's responsibility to determine the conditions which include but are not limited to the safe use, storage, disposal, and transportation. Such conditions must comply with all governmental regulations.