



Chief Medical Supplies Ltd.
411 – 19 Street, S. E.
Calgary, AB., Canada.
T2E 6J7
1.866.620.6034

Safety Data Sheet Acetic Acid, AA20

Document No. M-D6-014

Section I – Product and Company Identification

Synonym: Methane carboxylic acid; Acetic acid,
20.0% solution (w/v)

CAS No.: 64-19-7

Molecular Weight: 60.05

Chemical Formula: CH₃COOH

Product Code: AA20-4

Company Identification:

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For information, call:

1-403-207-6034

Emergency Number:

1-403-207-6034

Section II – Hazards Identification

Appearance: Colorless liquid

Physical State: Liquid

Odor: vinegar odor

Hazards of Product: Corrosive, flammable liquid and vapor. Causes severe digestive and respiratory tract burns. Causes severe eye and skin burns. May be harmful if absorbed through the skin.

Potential Health Hazards

Eye: Causes severe eye irritation. Contact with liquid or vapor causes severe burns and possible irreversible eye damage.

Skin: Causes skin burns. May be harmful if absorbed through the skin. Contact with the skin may cause blackening and hyperkeratosis of the skin of the hands.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause polyuria, oliguria and anuria. Rapidly absorbed from the gastrointestinal tract.

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.

Section III – Composition/Information on Ingredients

Ingredient Name	Chemical Formula	CAS No.	% by weight
Acetic acid	CH ₃ COOH	64-19-7	20% +/- 2%
Water	H ₂ O	7732-18-5	80% +/-2%

Section IV – First Aid Measures

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Section V – Fire Fighting Measures

Conditions of flammability:	Flammable
Means of extinction:	Not available
Flash point and method of determination:	39 °C (102 °F)
Upper flammable limit:	19.9%
Lower flammable limit:	4%
Auto-ignition temperature:	516°C (916°F)
Hazardous combustion products:	These products are carbon oxides (CO, CO ₂).
Explosion data - sensitivity to mechanical impact:	Not available
Explosion data - sensitivity to static discharge:	Not available

Fire Fighting Media and Instructions: Use DRY chemicals, CO₂, alcohol foam or water spray.

Special Remarks on Fire Hazards: Reacts with metals to produces flammable hydrogen gas. It will ignite on contact with potassium-tert-butoxide. A mixture of ammonium nitrate and acetic acid ignites when warmed, especially if warmed.

Special Remarks on Explosion Hazards: Stay upwind. Isolate and restrict area access. Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure build-up which could result in container rupture. Stop leak only if safe to do so. Water may be used to flush spills away from fire exposures and to dilute spills to non-flammable mixtures. Water run-off and vapour 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 vapour.

Section VI – Accidental Release Measures

Spill: Flush area with water to remove trace residue. Eliminate all ignition sources. Contain spill by diking. Absorb with an inert dry material and place in an appropriate waste disposal container. Neutralize the residue with sodium carbonate or crushed limestone. If fire potential exists, blanket spill with alcohol type aqueous film-forming foam or use water fog stream to disperse vapours.

Section VII – Handling and Storage

Handling Procedures: Protect from freezing. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. 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. Use with adequate ventilation. Wash thoroughly after handling. Handle and open containers with care. Keep the containers closed when not in use.

Storage Requirements: 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.

Section VIII – Exposure Controls/Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyewear: Splash goggles

Gloves: Gloves

Clothing: Synthetic apron

Respirator: Appropriate mask

Exposure Limits: OSHA Permissible Exposure Limit (PEL): 25 ppm (TWA); ACGIH Threshold Limit Value (TLV): 10 ppm (TWA); 10 ppm (STEL).

Section IX – Physical and Chemical Properties

Physical state: Liquid

Odour and appearance: Pungent, vinegar-like, strong sour

Odour threshold: Not available

Specific gravity: 1.03 (Water = 1)

Vapour pressure: 1.5 kPa (@ 20°C)

Vapour density: 2.8 (Air = 1)

Evaporation rate: Not available

Boiling point: Not available

Freezing point: Not available

pH (1% soln/water): Not available

Coefficient of water/oil distribution: Not Available

Taste: Vinegar, sour (Strong.)

Critical Temperature: Not available

Dispersion Properties: See solubility in water, diethyl ether, and acetone.

Solubility: Soluble in water

Section X – Stability and Reactivity

Stability: Stable

Conditions to avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible materials: Slightly reactive to reactive with oxidizing agents, reducing agents, metals, acids, alkalis.

Conditions of reactivity: Reacts violently with (some) bases: release of heat.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Corrosivity: Corrosive in presence of zinc. Slightly corrosive in presence of steel, of aluminum, of copper, brass. Non-corrosive in presence of glass, of stainless steel.

Special Remarks on Corrosivity: Not available

Polymerization: Will not occur.

Section XI – Toxicological Information

Route of entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Effects of Acute exposure: Corrosive to skin, eyes, and respiratory system. Liquid or spray mist may produce tissue damage, particularly in mucous membranes of the eyes, mouth and respiratory tract. Skin contact may produce burns. Eye contact can result in corneal damage or blindness. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Corrosive materials may cause serious injury if ingested. Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Other Toxic Effects on Humans: Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Irritancy of product: Not available

Sensitization to product: Not available

Carcinogenicity: Not available

Reproductive toxicity: Not available

Teratogenicity: Not available

Mutagenicity: Not available

Toxicologically synergistic products:

Toxicity to Animals: For Acetic Acid: Oral rat LD50: 3310 mg/kg. Dermal rabbit LD50: 1.06g/Kg.

Special Remarks on other Toxic Effects on Humans: Not available

Section XII – Ecological Information

Ecotoxicity: Not available

BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not available.

Section XIII – Disposal Considerations

Waste disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section XIV – Transport Information

Special shipping information: UN2790 III

Transport of Dangerous Goods (TDG): ACETIC ACID SOLUTION

Department of Transportation (DOT): CLASS 8: Corrosive material

International Maritime Dangerous Goods (IMO): None

International Civil Aviation Organization (ICAO): None

Section XV – Regulatory Information

WHIMIS classification: CLASS E: Corrosive material.

OSHA: Not available

SERA: Not available

TSCA: CAS# 64-19-7 is listed on the TSCA inventory.

Section XV – Other Information

SDS creation date: Mar 10, 2000

Last revision date: Jan 11, 2016

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***This product has been classified in accordance with the hazard criteria of the CPR
and the SDS contains all of the information required by the CPR***