

Material Safety Data Sheet

LA3154
Acetic Acid 60%

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA3154
Product Name: Acetic Acid 60%
Synonyms: None
Chemical Family: None Known
Application: Solvent.

Distributed By:
 Univar Canada Ltd.
 9800 Van Horne Way
 Richmond, BC
 V6X 1W5

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.
Preparation date of MSDS: 05/Apr/2017
Telephone number of preparer: 1-866-686-4827

2. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

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

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.

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percentage (W/W)	LD50s and LC50s Route & Species:
Acetic Acid 64-19-7	40-70	Dermal LD50 Rabbit = 1060 mg/kg Inhalation LC50 Rat = 11.4 mg/L 4 h Oral LD50 Rat = 3310 mg/kg
Water 7732-18-5	30-60	Oral LD50 Rat > 90 mL/kg

Note: No additional remark.

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact: Remove contaminated shoes and discard. In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation (CPR) immediately. Get medical attention immediately.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

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

5. FIRE FIGHTING MEASURES

Flash Point: >93.3 °C / >200 °F

Flash Point Method: Closed cup.

Autoignition Temperature: 463°C /865.4°F

Flammable Limits in Air (%): Lower: 4% Upper: 19.9%

Extinguishing Media: Use DRY chemicals, CO₂, alcohol foam or water spray.

Special Exposure Hazards: Stay upwind. Isolate and restrict area access. Containers exposed to intense heat from fires should be cooled with water to prevent vapor 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 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.

Hazardous Decomposition/Combustion Materials (under fire conditions): Carbon monoxide. Carbon dioxide. Toxic fumes.

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 3, FLAMMABILITY 1, INSTABILITY 0

HMIS RATINGS FOR THIS PRODUCT ARE: HEALTH 3, FLAMMABILITY 1, REACTIVITY 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment. Isolate for 800 meters or 0.5 miles in all directions if tank, rail car, or tank truck is involved in fire. Evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate. Spills may expose downwind areas to toxic or flammable concentrations over considerable distances in some cases.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed.

Procedure for Clean Up: 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 vapors.

7. HANDLING AND STORAGE

Handling: 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: 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

Engineering Controls:

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

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.

Gloves:

Neoprene gloves. Appropriate chemical resistant gloves should be worn.

Skin 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.

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

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ingredients	Exposure Limit - ACGIH	Exposure Limit - OSHA	Immediately Dangerous to Life or Health - IDLH
Acetic Acid	15 ppm STEL 10 ppm TLV-TWA	10 ppm TWA 25 mg/m ³ TWA	50 ppm
Water	Not available.	Not available.	Not Available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Colorless

Odor: Vinegar Smell Acrid Strong

pH 2.4 (60 g/l)

Specific Gravity: 1.0446 (25°C)

Boiling Point: 117°C /242.6°F

Freezing/Melting Point: -26.5°C / 15.7°F

Vapor Pressure: 20.79 hPa (25°C)

Vapor Density: 2.1

% Volatile by Volume: Not Available.

Evaporation Rate: Not Available.

Solubility: Completely soluble.

VOCs: Not Available.

Viscosity: Dynamic: 1.056 mPa.s (25°C); Kinematic 1.011 mm²/s

Molecular Weight: Not Available.

Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid excessive heat, open flames and all ignition sources.

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

Hazardous Decomposition Products: Toxic fumes. Irritating vapors. Oxides of carbon.

Additional Information:

No additional remark.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

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.

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

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.

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

Acute Test of Product:

Acute Oral LD50: Not Available.

Acute Dermal LD50: Not Available.

Acute Inhalation LC50: Not Available.

Carcinogenicity:

Component	IARC - Carcinogens	ACGIH - Carcinogens
Acetic Acid 64-19-7 (40-70)	Not listed.	Not listed.
Water 7732-18-5 (30-60)	Not listed.	Not listed.

Carcinogenicity Comment: No additional information available.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: 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.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Acetic Acid	75 mg/L LC50 (Lepomis macrochirus) 96 h static 79 mg/L LC50 (Pimephales promelas) 96 h static	Not Available.	Not Available.
Water	Not Available.	Not Available.	Not Available.

Other Information:

Ecotoxicity: The aquatic toxicity and biodegradation of acetic acid are expected to be influenced by its potential to lower pH.

Degradation: Acetic acid will biodegrade readily if released to water (e.g., 5-Day BOD's 63-81%) or soil. The atmospheric photochemical degradation half-life is estimated to be 26.7 days.

Bioaccumulation: The log n-octanol water partition coefficient for acetic acid is -0.17. This suggests that acetic acid has low potential to bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: ACETIC ACID SOLUTION

DOT Hazardous Class 8

DOT UN Number: UN2790

DOT Packing Group: II

DOT Reportable Quantity (lbs): Not Available.

Note: No additional remark.

Marine Pollutant: No.

TDG (Canada):

TDG Shipping Name: ACETIC ACID SOLUTION

Hazard Class: 8

UN Number: UN2790

Packing Group: II

Note: No additional remark.

Marine Pollutant: No.

15. REGULATORY INFORMATION

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

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

U.S. Regulatory Rules

Ingredients	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Acetic Acid	Not Listed.	Listed	Not Listed.
Water	Not Listed.	Not Listed.	Not Listed.

California Proposition 65: Not Listed.

MA Right to Know List: Listed.

Pennsylvania Right to Know List: Listed.

New Jersey Right-to-Know List: Listed.

Additional Notes: Not Available.

WHMIS Hazardous Class:

E CORROSIVE MATERIAL



16. OTHER INFORMATION

Additional Information:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Disclaimer:

NOTICE TO READER:

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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