


Material Safety Data Sheet

Section 1. Chemical Product and Company Identification		
Product Name:	Acetic Acid	Version: 5 Effective Date: July 10, 2017
Supplier/ Manufacturer:	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
Material Uses	Industrial acid, reactant, chemical intermediate	
24 Hour Emergency	Canutec (613) 996-6666	
WHMIS		
		
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		
HMIS Ratings for this product are: Health 3 , Flammability 2 , Reactivity 0		

Section 2. Composition and Information on Ingredients		
Name	CAS#	% by weight
Acetic acid	64-19-7	96 - 100
See Section 8 for information on permissible exposure limits and threshold limit values		

Section 3. Hazards Identification	
Physical State and Appearance	Clear, colourless, viscous liquid with strong acid vinegar odour
Hazard Summary	Corrosive
Routes of Exposure	Skin contact and absorption, eye contact, inhalation and ingestion
Potential Acute Health Effects	Skin: Corrosive. Causes burns. Harmful if absorbed through the skin. Skin may show redness, discolouration, swelling, itching, burning or blistering. Prolonged or repeated contact may cause sensitisation.

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	<p>Eyes: Corrosive. Causes severe eye burns. May cause permanent damage to the eyes. Symptoms may include: irritation, burning, pain, watering and or change of vision.</p> <p>Inhalation: Symptoms of exposure may include: nasal discharge, hoarseness, coughing, chest pain and breathing difficulty, general irritation of the respiratory tract. Accumulation of fluid in the lungs may occur (Pulmonary oedema)</p> <p>Ingestion: Corrosive. Causes digestive tract burns. Symptoms may include: inflammation of the mouth, throat, esophagus and /or stomach. Nausea, vomiting, loss of appetite, gastrointestinal irritation and / or diarrhea.</p>
Medical Conditions Aggravated by Exposure	Fumes and vapours may affect persons with conditions such as asthma
See Toxicological Information – Section 11	
Additional Hazard Identification Remarks	None

Section 4. First Aid Measures	
Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.
Skin Contact	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Ingestion	Give two glasses of water. Do not induce vomiting. Lay victim on left side to prevent aspiration of any vomit. Seek immediate medical attention.
Notes to Physician	Treatment should be based on sound judgment of the physician and reactions of the patient. Observe for pulmonary oedema.
Additional First Aid Remarks	None

Section 5. Fire Fighting Measures	
Flammability of the Product	Combustible liquid
Flash Point	39 °C
Explosive Limits	LEL: 4% UEL: 16 %
Auto Ignition Temperature	516 °C
Static Discharge	Yes
Suitable Extinguishing Media	Dry chemical, CO ₂ , alcohol foam or water spray

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Hazardous Combustion Products	Toxic fumes, carbon monoxide, carbon dioxide
Precautions for Fire Fighting	Fire fighters should wear self contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire.

Section 6. Accidental Release Measures	
Personal Precautions	Chemical resistant gloves (neoprene), coveralls (rubber) and boots rubber
Environmental Precautions	Areas downwind of a spill may be exposed to toxic fumes and vapours. Isolate area. Do not allow to enter surface drains and watercourses.
Methods for Clean Up	Remove all sources of ignition. Isolate area. If fire potential exists, blanket spill with alcohol type aqueous film-forming foam or use water fog stream to disperse vapours. Neutralise with sodium carbonate or crushed limestone. Absorb with an inert dry material and place in an appropriate container for waste disposal. Flush area with water to remove trace residues.

Section 7. Handling and Storage	
Handling	Corrosive and combustible liquid. Use in a well ventilated area. Avoid breathing vapours. Empty containers may contain hazardous residues. Equipment should be grounded to prevent static discharge.
Storage	Store in a cool, dry, well ventilated area away from all sources of ignition. Product segregation should be in place. Keep containers closed when not in use. Store out of direct sunlight and on an impermeable floor.

Section 8. Exposure Controls and Personal Protection				
Exposure Guidelines	TWA: 8 Hr	STEL: 15 min	Ceiling	IDLH *
Acetic acid	10 ppm OSHA	15 ppm		50 ppm
* Immediately Dangerous to Life and Health				
Exposure Controls	Local exhaust ventilation			
Personal Protection				
Respiratory	Air purifying respirator fitted with acid vapour cartridges must be worn if exposure limits are exceeded			
Skin	Chemical resistant gloves (neoprene), coveralls (rubber) and boots (rubber)			
Eyes	Safety glasses			
Other	Safety showers and eyewash stations should be available			

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Section 9. Physical and Chemical Properties	
Physical State and Appearance	Clear, colourless, viscous liquid with strong acrid vinegar odour
Odour Threshold	No data
pH	2.4 for a 1 % solution
Boiling Point	118 °C
Melting Point / Freezing point	16.6 °C
Evaporation Rate	0.97
Vapour Density	2.1
Vapour Pressure	11 mmHg @ 20 °C
Specific Gravity	1.0492 – 1.0498 @ 20 °C
Solubility in Water	Completely soluble
% Volatile	No data
Other Data	None

Section 10. Stability and Reactivity	
Chemical Stability	Stable
Hazardous Polymerisation	Will not occur
Conditions to Avoid	Excessive heat, open flames and all sources of ignition
Materials to Avoid	Strong oxidising agents. Strong alkalis. Common metals and their alloys. Aldehydes. Ammonium nitrate. Sodium peroxide. Carbonates. Hydroxides. Oxides. Phosphates. Perchloric acid
Hazardous Decomposition Products	Oxides of carbon. Irritating vapours. Toxic fumes

Section 11. Toxicological Information	
Principle Routes of Exposure	
Skin:	Corrosive. Causes burns. Harmful if absorbed through the skin. Skin may show redness, discolouration, swelling, itching, burning or blistering. Prolonged or repeated contact may cause sensitisation.
Eyes:	Corrosive. Causes severe eye burns. May cause permanent damage to the eyes. Symptoms may include: irritation, burning, pain, watering and or change of vision.
Inhalation:	Symptoms of exposure may include: nasal discharge, hoarseness, coughing, chest pain and breathing difficulty, general irritation of the respiratory tract. Accumulation of fluid in the lungs may occur (Pulmonary oedema)
Ingestion:	Corrosive. Causes digestive tract burns. Symptoms may include: inflammation of the mouth, throat, esophagus and /or stomach. Nausea, vomiting, loss of appetite, gastrointestinal irritation and / or diarrhea.
Additional Information	

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Acute Toxicity	
Acetic acid	LD50: 3310 mg/kg (Rat, oral) LD50: 1060 mg/kg (Rabbit, dermal) LC50: 11.4 mg/L (Rat, inhalation)
Chronic Toxic Effects – None known	
Carcinogenicity – Not listed	
Reproductive Toxicity / Teratogenicity / Embryotoxicity / Mutagenicity – Mixed results in vitro. The positive results are thought to be a result of acidification of the culture media.	

Section 12. Ecological Information	
Ecotoxicity	Acetic acid: LC50: 79 mg/l (Pimephales promelas) LC50: 75 mg/l (Lepomis macrochirus)
BOD and COD	BOD: 5 day = 63 – 81 %
Biodegradability / OECD	Readily biodegradable in water and air
Toxicity of the Products of Biodegradation	No data
Special Remarks	Has a low potential to bioaccumulate

Section 13. Disposal Considerations	
Dispose of in accordance with local, provincial and federal regulations	

Section 14. Transport Information	
TDG Classification	Acetic acid glacial: Class 8 (3), UN 2789, Packing Group II
Emergency Response Guide #	ERG # 132
Marine Pollutant	No
Special Precautions	None

Section 15. Regulatory Information	
Canada – DSL Inventory	All components of this product are either on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or exempt
TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
WHMIS Hazard Class	B3 E
Additional Information	None

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Section 16. Other Information**Prepared by:**

Chemfax Products Ltd., Technical Department

Date Prepared: 22 June, 2011**Revision Date:** July 10, 2017**Disclaimer**

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