


# Material Safety Data Sheet

Section 1. Chemical Product and Company Identification		
<b>Product Name:</b>	<b>Ethyl Alcohol</b>	<b>Version: 3</b> <b>Effective Date: June 25, 2014</b>
<b>Supplier / Manufacturer:</b>	Chemfax Products Ltd 11444 - 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
<b>Material Uses</b>	Solvent	
<b>24 Hour Emergency</b>	Canutec (613) 996-6666	
<b>WHMIS</b>		
		
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		
<b>HMIS Ratings</b> for this product are: <b>Health 1 , Flammability 3 , Reactivity 0</b>		

Section 2. Composition and Information on Ingredients		
Name	CAS#	% by weight
Ethanol	64-17-5	60 – 100
Methanol	67-56-1	10 – 30
Ethyl Acetate	141-78-6	0.1 – 1.0
See Section 8 for information on permissible exposure limits and threshold limit values		

Section 3. Hazards Identification	
<b>Physical State and Appearance</b>	Clear, colourless liquid
<b>Hazard Summary</b>	Irritant, toxic
<b>Routes of Exposure</b>	Skin – contact, absorption, eyes, inhalation, ingestion

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<b>Potential Acute Health Effects</b>	<p><b>Skin:</b> Irritant. May be absorbed through the skin and cause effects similar to those due to ingestion. May cause dermatitis and skin sensitisation.</p> <p><b>Eyes:</b> Irritant. May cause severe eye irritation, with pain and swelling of the conjunctiva.</p> <p><b>Inhalation:</b> Irritant. Will cause irritation of the respiratory system. May cause headaches and dizziness, and other central nervous system effects.</p> <p><b>Ingestion:</b> May cause headache, nausea, abdominal discomfort, vomiting, diarrhea, dizziness, drowsiness, faintness, lack of coordination and unconsciousness. The small amount of methanol present may cause similar symptoms, with much more severe reactions, including possible blindness and death if left untreated.</p>
<b>Medical Conditions Aggravated by Exposure</b>	None known
See Toxicological Information – Section 11	
<b>Additional Hazard Identification Remarks</b>	

<b>Section 4. First Aid Measures</b>	
<b>Eye Contact</b>	Flush eyes with water for 15 minutes. Seek medical attention.
<b>Skin Contact</b>	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.
<b>Inhalation</b>	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting. Lay victim on left side to prevent aspiration of any vomit. Seek immediate medical attention.
<b>Notes to Physician</b>	This product contains Methanol, a toxic substance that can lead to blindness, as well as death.
<b>Additional First Aid Remarks</b>	

<b>Section 5. Fire Fighting Measures</b>	
<b>Flammability of the Product</b>	Flammable
<b>Flash Point</b>	12.5 °C
<b>Explosive Limits</b>	LEL: 2.2 %      UEL: 36 %
<b>Auto Ignition Temperature</b>	385 – 427 °C
<b>Static Discharge</b>	Yes
<b>Suitable Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , alcohol foam or water spray

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<b>Hazardous Combustion Products</b>	Carbon monoxide, carbon dioxide and formaldehyde
<b>Precautions for Fire Fighting</b>	Fire fighters should wear self contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire. Vapours from this product may travel or be moved by air currents, these can be ignited by sparks, flames, heaters, static discharge etc.

<b>Section 6. Accidental Release Measures</b>	
<b>Personal Precautions</b>	Wear appropriate protective equipment
<b>Environmental Precautions</b>	Prevent entry into sewers or streams, dike if needed.
<b>Methods for Clean Up</b>	Isolate area, restrict access, remove all sources of ignition. Small spills can be soaked up on absorbent material, removed and packed in appropriate containers for disposal. Large spills should be diked and pumped into suitable containers, residues can be absorbed, then the area washed with water.

<b>Section 7. Handling and Storage</b>	
<b>Handling</b>	Avoid contact with eyes, skin and clothing. Ground all containers when in use. Keep containers closed when not in use. Keep away from all sources of ignition and open flames. Do not cut or weld empty containers as residues are highly flammable.
<b>Storage</b>	Store in a cool dry place away from all sources of ignition, open flames and static discharge. Keep all containers closed when not in use.

<b>Section 8. Exposure Controls and Personal Protection</b>				
<b>Exposure Guidelines</b>	<b>TWA: 8 Hr</b>	<b>STEL: 15 min</b>	<b>Ceiling</b>	<b>IDLH *</b>
<b>Ethanol</b>	1000 ppm (OSHA)	1000 ppm (ACGIH)		3300 ppm
<b>Methanol</b>	200ppm (skin) (ACGIH)	250 ppm (skin) (ACGIH)		6000 ppm
<b>Ethyl Acetate</b>	400 ppm (ACGIH)			2000 ppm
* Immediately Dangerous to Life and Health				
<b>Exposure Controls</b>	Local exhaust ventilation – must be explosion proof			

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<b>Personal Protection</b>	
<b>Respiratory</b>	Up to 1000 ppm, an approved air purifying respirator fitted with the organic vapour cartridges should be worn. Above this concentration air supply respirator is recommended.
<b>Skin</b>	Neoprene gloves and coveralls – should be cotton or non static generating fabric.
<b>Eyes</b>	Glasses or goggles
<b>Other</b>	None

<b>Section 9. Physical and Chemical Properties</b>	
<b>Physical State and Appearance</b>	Clear, colourless liquid with sweet alcohol odour
<b>Odour Threshold</b>	No data
<b>pH</b>	Not applicable
<b>Boiling Point</b>	75.6 °C
<b>Melting Point / Freezing point</b>	No data
<b>Evaporation Rate</b>	No data
<b>Vapour Density</b>	No data
<b>Vapour Pressure</b>	No data
<b>Specific Gravity</b>	0.7889
<b>Solubility in Water</b>	Completely soluble
<b>% Volatile</b>	100 %
<b>Other Data</b>	None

<b>Section 10. Stability and Reactivity</b>	
<b>Chemical Stability</b>	Stable
<b>Hazardous Polymerisation</b>	Will not occur
<b>Conditions to Avoid</b>	Avoid excessive heat, open flames and all sources of ignition.
<b>Materials to Avoid</b>	Oxidising agents
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide and formaldehyde

<b>Section 11. Toxicological Information</b>	
<b>Principle Routes of Exposure</b>	
<b>Skin:</b>	Irritant. May be absorbed through the skin and cause effects similar to those due to ingestion. May cause dermatitis and skin sensitisation.
<b>Eyes:</b>	Irritant. May cause severe eye irritation, with pain and swelling of the conjunctiva.
<b>Inhalation:</b>	Irritant. Will cause irritation of the respiratory system. May cause headaches and dizziness, and other central nervous system effects.

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<b>Ingestion:</b>	May cause headache, nausea, abdominal discomfort, vomiting, diarrhea, dizziness, drowsiness, faintness, lack of co-ordination and unconsciousness. The small amount of methanol present may cause similar symptoms, with much more severe reactions, including possible blindness and death if left untreated.
<b>Additional Information</b>	Long term exposure to Ethanol may result in the development of progressive liver injury with fibrosis. Repeated exposure to Methanol may cause systemic poisoning, brain injury, impaired vision and blindness
<b>Acute Toxicity</b>	
<b>Ethanol</b>	LD50; 7060 mg/kg (Rat, oral)
<b>Methanol</b>	LD50: 5628 mg/kg (Rat, oral) LC50: 64000 ppm (Rat, inhalation) 4 Hr LD50: 15800 mg/kg (Rabbit, dermal)
<b>Ethyl Acetate</b>	LD50: 5620 mg/kg (Rat, oral) LD50: 18000 mg/kg (Rabbit, dermal)
<b>Chronic Toxic Effects – Long term liver damage</b>	
<b>Carcinogenicity – Ethanol – IARC – Group 1, ACGIH A3</b>	
<b>Reproductive Toxicity / Teratogenicity / Embryotoxicity / Mutagenicity –</b> <b>Methanol</b> – in experimental animals, methanol is fetotoxic, teratogenic and has produced significant behavioral abnormalities in offspring at doses not producing maternal toxic effects. <b>Ethanol</b> – may cause birth defects or other adverse effects on pregnancy. Effects depend on duration and level of exposure.	

<b>Section 12. Ecological Information</b>	
<b>Ecotoxicity</b>	
<b>Ethanol</b>	LC50: 12900 mg/l (Oncorhynchus mykiss) LC50: 14.2 mg/l (Pimephales promelas)
<b>Methanol</b>	LC50: 13 mg/l (Oncorhynchus mykiss) LC50: 29400 mg/l (Pimephales promelas)
<b>Ethyl Acetate</b>	LC50: 484 mg/l (Oncorhynchus mykiss) LC50: 230 mg/l (Pimephales promelas)
<b>BOD and COD</b>	No data
<b>Biodegradability / OECD</b>	No data
<b>Toxicity of the Products of Biodegradation</b>	No data
<b>Special Remarks</b>	None

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### Section 13. Disposal Considerations

Dispose of in accordance with local, provincial and federal regulations

### Section 14. Transport Information

<b>TDG Classification</b>	Alcohols, Flammable, Toxic, N.O.S. (Methanol), UN 1986, Class 3 (6.1), Packing Group II
<b>Emergency Response Guide #</b>	131
<b>Marine Pollutant</b>	No
<b>Special Precautions</b>	None

### Section 15. Regulatory Information

<b>Canada – DSL Inventory</b>	All components of this product are either on the DSL, the NDSL or exempt
<b>TSCA</b>	All components of this product are either on the TSCA or exempt
<b>WHMIS Hazard Class</b>	B2, D1B, D2A, D2B
<b>Additional Information</b>	None

### Section 16. Other Information

**Prepared by:**

Chemfax Products Ltd., Technical Department

**Date Prepared:** September 23, 2011

**Revision Date:** June 25, 2014

**Disclaimer**

Notice to reader

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