





# Safety Data Sheet

Section 1. Identification	
<b>Product Identifier</b>	Ethyl Alcohol
	<b>Version: 4</b> <b>Effective Date: 7 July, 2017</b>
<b>Other Means Of Identification</b>	Ethanol
<b>Initial Supplier Identifier</b>	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055
<b>Recommended Use and Restrictions On Use</b>	Solvent. No restrictions
<b>Product Family</b>	Alcohol
<b>24 Hour Emergency</b>	Canutec (613) 996-6666

Section 2. Hazard Identification	
<b>Hazard Classification</b>	   
<b>Physical Hazards</b>	Flammable Liquids - Category 2
<b>Health Hazards</b>	Acute Toxicity – Category 3 Eye Damage / Irritation – Category 2A Specific Target Organ Toxicity (single exposure) – Category 1
<b>Signal Word</b>	Danger
<b>Hazard Statement</b>	Highly flammable liquid and vapour. Toxic if swallowed. Causes serious eye irritation. Causes damage to organs liver, nerves, and heart.
<b>Precautionary Prevention Statement</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use non-sparking tools. Ground and bond container and receiving equipment. Take action to prevent static discharge. Use explosion proof electrical, ventilating and lighting equipment. Wear protective gloves, clothing, eye and face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

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	Do not breathe dust, fumes, gas, mist, vapours or spray.
<b>Precautionary Response Statement</b>	<p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.</p> <p>IF SWALLOWED: Immediately call doctor. Rinse mouth.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.</p> <p>If exposed or concerned: Call a doctor.</p> <p>Specific treatment do not induce vomiting unless directed by medical personnel.</p> <p>In case of fire: Use alcohol resistant foam to extinguish</p>
<b>Precautionary Storage Statement</b>	Store in a well- ventilated place. Keep cool. Store locked up.
<b>Precautionary Disposal Statement</b>	Dispose of contents / container in accordance with local regulations.
<b>Other Hazards</b>	None

### Section 3. Composition / Information on Ingredients

Chemical Name	Common Name or Synonyms	CAS NO. and Other Unique Identifiers	% by weight
Ethanol	Ethyl alcohol	64-17-5	60 - 100
Methanol	Methyl alcohol	67-56-1	10 – 30
Ethyl Acetate	Ethyl ethanoate	141-78-6	0.1 – 1.0

### Section 4. First-Aid Measures

<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>	Rinse mouth with water if conscious. Do not induce vomiting. Lay victim on left side to prevent aspiration of any vomit. Seek immediate medical attention.
<b>Most Important Symptoms and Effects Both Acute and Delayed</b>	This product contains Methanol, a toxic substance that can lead to blindness, as well as death.

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<b>Immediate Medical Attention and Special Treatment</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
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### Section 5. Fire-Fighting Measures

<b>Suitable and Unsuitable Extinguishing Media</b>	Dry chemical, alcohol resistant foam, carbon dioxide
<b>Hazardous Combustion Products</b>	Carbon monoxide and dioxide
<b>Specific Hazards Arising From the Product</b>	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
<b>Special Protective Equipment and Precautions For Fire-Fighters</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.

### Section 6. Accidental Release Measures

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Gloves (nitrile), coveralls (Nomex), safety glasses. Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
<b>Environmental Precautions</b>	Do not allow product to enter surface drains and watercourses
<b>Methods and Materials For Containment and 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.

### Section 7. Handling and Storage

<b>Precautions For Safe 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.
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<b>Conditions For Safe Storage</b>	Store in a cool dry place away from all sources of ignition. Empty containers may have flammable residues present. Keep container closed when not in use. Ground containers when in use.
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### Section 8. Exposure Controls / Personal Protection

Control Parameters	TWA: 8 Hr	STEL: 15 min	Ceiling	IDLH *
Ethanol	1000 ppm OSHA	1000 ppm ACGIH		3300 ppm
Methanol	200 ppm (skin) ACGIH	250 ppm (skin) ACGIH		6000 ppm
Ethyl Acetate	400 ppm ACGIH			2000 ppm
* Immediately Dangerous to Life and Health				
<b>Exposure Controls</b>	Local exhaust ventilation			
<b>Appropriate Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.			
<b>Individual Protective Measures</b>				
<b>Eye/Face Protection</b>	Wear goggles			
<b>Skin Protection</b>	Neoprene gloves and coveralls – should be cotton or non static generating fabric			
<b>Respiratory Protection</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			

### Section 9. Physical and Chemical Properties

<b>Appearance</b>	Clear, colourless liquid
<b>Odour</b>	Sweet Alcohol
<b>Odour Threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Flash Point</b>	12.5 °C
<b>Boiling Point and Boiling Range</b>	75.6 °C
<b>Melting Point and Freezing Point</b>	No data
<b>Evaporation Rate</b>	Not determined



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<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper and Lower Flammability or Explosive Limits</b>	3.3 %(v) and 19 %(v)
<b>Vapour Pressure</b>	Not determined
<b>Vapour Density</b>	Not determined
<b>Relative Density</b>	0.7889
<b>Solubility</b>	Completely soluble
<b>Partition co-efficient, n-Octanol/Water</b>	log Pow: -0.349 at 24 °C (75 °F)
<b>Auto-ignition Temperature</b>	385 – 427 °C
<b>Decomposition Temperature</b>	No data
<b>Viscosity</b>	No data

### Section 10. Stability and Reactivity

<b>Reactivity</b>	Vapours may form explosive mixture with air.
<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur
<b>Conditions to Avoid</b>	Avoid excessive heat, open flames and all sources of ignition.
<b>Incompatible Materials</b>	Oxidizing agents.
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide and formaldehyde.

### Section 11. Toxicological Information

<b>Component Toxicity</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Ethanol	7.06 g/kg (Rat)		
Methanol	5.628 g/kg (Rat)	15.8 g/kg (Rabbit)	64000ppm, 4h (Rat)
Ethyl Acetate	5.62 g/kg (Rat)	18g/kg (Rabbit)	
<b>Likely Routes of Exposure</b>			
<b>Skin:</b>	May be absorbed through the skin and cause effects similar to those due to ingestion. May cause dermatitis and skin sensitisation.		
<b>Eyes:</b>	May cause severe eye irritation, with pain and swelling of the conjunctiva.		
<b>Inhalation:</b>			

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<b>Ingestion:</b>	Will cause irritation of the respiratory system. May cause headaches and dizziness, and other central nervous system effects. 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>Acute Toxicity Estimate (ATE)</b>	LD50 Oral - Rat - 10,470 mg/kg
<b>STOT (Specific Target Organ Toxicity) – Single Exposure</b>	No data
<b>Aspiration Toxicity</b>	No data
<b>STOT (Specific Target Organ Toxicity) – Repeated Exposure</b>	No data
<b>Skin Corrosion / Irritation</b>	Rabbit - No skin irritation - 24 h - OECD Test Guideline 404
<b>Serious Eye Damage / Irritation</b>	Rabbit - Moderate eye irritation - OECD Test Guideline 405
<b>Respiratory or Skin Sensitization</b>	No data
<b>Carcinogenicity</b>	Ethanol – IARC – Group 1, ACGIH A3
<b>Reproductive Toxicity</b>	
- <b>Sexual Function and Fertility</b>	
- <b>Development of Offspring</b>	Methanol – in experimental animals, methanol is fetotoxic, teratogenic and has produced significant behavioral abnormalities in offspring at doses not producing maternal toxic effects. Ethanol – may cause birth defects or other adverse effects on pregnancy. Effects depend on duration and level of exposure.
- <b>Effects on or via Lactation</b>	No data
<b>Germ Cell Mutagenicity</b>	No data
<b>Interactive Effects</b>	No data
<b>Other Information</b>	Not applicable

### Section 12. Ecological Information

<b>Ecotoxicity</b>	Ethanol: LC50: 12900 mg/l (Oncorhynchus mykiss) LC50: 14.2 mg/l (Pimephales promelas)
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	Methanol: LC50: 13 mg/l (Oncorhynchus mykiss) LC50: 29400 mg/l (Pimephales promelas) Ethyl acetate: LC50: 484 mg/l (Oncorhynchus mykiss) LC50: 230 mg/l (Pimephales promelas)
<b>Persistence and Degradability</b>	Result: 95 % - Readily biodegradable
<b>Bioaccumulative Potential</b>	No data
<b>Biodegradability</b>	Expected to be completely biodegradable
<b>Mobility in Soil</b>	No data
<b>Other Adverse Effects</b>	Not applicable

### Section 13. Disposal Considerations

<b>Disposal Considerations</b>	Dispose of contents / container in accordance with local regulations
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### Section 14. Transport Information

<b>UN Number</b>	1986
<b>UN Proper Shipping Name</b>	Alcohols, Flammable, Toxic, N.O.S. (Methanol)
<b>Transport Hazard Class(es)</b>	3 (6.1)
<b>Packaging Group</b>	II
<b>Environmental Hazards</b>	Not applicable
<b>Bulk Transport</b>	Not applicable
<b>Special Precaution</b>	Not applicable
<b>DOT Erg#</b>	131

### Section 15. Regulatory Information

<b>Canada – DSL Inventory</b>	All components of this product are either on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or exempt
<b>TSCA</b>	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
<b>Additional Information</b>	None

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Section 16. Other Information	
<b>NFPA Rating</b>	Health-2/ Flammability-3/Reactivity-0/Special Hazard-Not applicable
<b>HMIS Rating</b>	Health-2/Flammability-3/Reactivity-0/Personal Protection-See Section 8.
<b>Prepared by:</b>	Chemfax Products Ltd., Technical Department
<b>Date Prepared:</b>	September 23, 2011
<b>Date of Latest Revision:</b>	29 November, 2016
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