

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Ethanol Blend</b>
<b>Other means of identification</b>	
<b>Synonyms</b>	Other Than Standard Wine Orange Wine with Natural Flavors, Other Than Standard Wine Grape Wine with Natural Flavors
<b>Recommended use</b>	Flavoring.
<b>Recommended restrictions</b>	Uses other than the recommended use.

### Manufacturer/Importer/Supplier/Distributor information

<b>Company name</b>	Greenfield Global Inc. (The technical data referenced below applies to products sold by
<b>Address</b>	Greenfield Global Inc., under the names Greenfield Global, Pharmco, and Commercial Alcohols.) 6985 Financial Drive Mississauga, Ontario L5N 0G3 Canada
<b>Telephone</b>	(905) 790-7500
<b>Website</b>	<a href="http://www.greenfield.com">http://www.greenfield.com</a>
<b>24-Hour Emergency Contact:</b>	CHEMTREC: 1-800-424-9300

## 2. Hazard identification

<b>Physical hazards</b>	Flammable liquids	Category 3
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Flammable liquid and vapour. Causes serious eye irritation.

### Precautionary statement

**Prevention** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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 advice/attention. In case of fire: Use appropriate media to extinguish.

**Storage** Store in a well-ventilated place. Keep cool.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental information** None.

**Other hazards** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS numbe	%
Ethanol		64-17-5	10 - 30

**Composition comments** All concentrations are in percent by weight unless otherwise indicated.

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Flammable liquid and vapour.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
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**Conditions for safe storage, including any incompatibilities**

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. ACGIH Threshold Limit Values (TLV)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1880 mg/m3
		1000 ppm

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

**Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

**Canada - Northwest Territories**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1250 ppm
	TWA	1000 ppm

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1000 ppm

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended**

Components	Type	Value
Ethanol (CAS 64-17-5)	15 minute	1250 ppm
	8 hour	1000 ppm

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Chemical goggles are recommended.

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear suitable protective clothing.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Selection and use of respiratory protective equipment should be in accordance with CSA Standard Z94.4. Appropriate respirator selection should be made by a qualified professional.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Physical state** Liquid.  
**Form** Liquid.  
**Colour** Not available.  
**Odour** Not available.  
**Melting point/freezing point** Not available.  
**Boiling point or initial boiling point and boiling range** Not available.  
**Flammability** Not applicable.  
**Upper/lower flammability or explosive limits**  
**Explosive limit - lower (%)** Not available.  
**Explosive limit – upper (%)** Not available.  
**Flash point** 36 - 49 °C (96.8 - 120.2 °F)  
**Auto-ignition temperature** Not available.  
**Decomposition temperature** Not available.  
**pH** Not available.  
**Kinematic viscosity** Not available.  
**Solubility**  
**Solubility (water)** Not available.  
**Partition coefficient (n-octanol/water) (log value)** Not available.  
**Vapour pressure** Not available.  
**Density and/or relative density** Not available.  
**Vapour density** Not available.  
**Particle characteristics** Not available.  
**Other information**  
**Explosive properties** Not explosive.  
**Oxidising properties** Not oxidising.

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.  
**Chemical stability** Material is stable under normal conditions.  
**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.  
**Conditions to avoid** Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.  
**Incompatible materials** Strong oxidising agents.  
**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.  
**Skin contact** Prolonged skin contact may cause temporary irritation.

<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Information on toxicological effects**

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg
<b>Inhalation</b>		
<i>Vapour</i>		
LC50	Mouse	39 g/m3, 4 Hours
<b>Oral</b>		
LD50	Rat	7000 - 11000 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitisation**

**Respiratory sensitisation** Not a respiratory sensitiser.

**Skin sensitisation** This product is not expected to cause skin sensitisation.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

**ACGIH Carcinogens**

Ethanol (CAS 64-17-5) A3 Confirmed animal carcinogen with unknown relevance to humans.

**Canada - Manitoba OELs: carcinogenicity**

Ethanol (CAS 64-17-5) Confirmed animal carcinogen with unknown relevance to humans.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	LC50	Ceriodaphnia dubia 5012 mg/l, 48 hours
		Daphnia magna 454 mg/l, 11 days
Fish	LC50	Pimephales promelas 13480 mg/l, 96 hours
<i>Chronic</i>		
Crustacea	NOEC	Ceriodaphnia dubia 9.6 mg/l, 10 days

**Persistence and degradability** No data is available on the degradability of this product.

## Bioaccumulative potential

### Partition coefficient n-octanol / water (log Kow)

Ethanol (CAS 64-17-5) -0.31

**Mobility in soil** No data available.

**Other adverse effects** No data available.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### TDG

Not regulated as dangerous goods.

Exempt as an aqueous solution of alcohol for transportation by ground under Part 1, Section 1.36 (SOR/2008-34 ) of the Canadian Transportation of Dangerous Goods (TDG) regulations.

### IATA

Not regulated as dangerous goods.

IATA Special Provision A 58 - Aqueous solutions containing 24% or less alcohol by volume is not subject to these regulations.

### IMDG

Not regulated as dangerous goods.

IMDG Special Provision 144 - Aqueous solutions containing 24% or less alcohol by volume is not subject to these regulations.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## 15. Regulatory information

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

### Controlled Drugs and Substances Act

Not regulated.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto Protocol

Not applicable.

#### Montreal Protocol

Not applicable.

#### Basel Convention

Not applicable.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

<b>Issue date</b>	28-April-2025
<b>Revision date</b>	03-March-2026
<b>Version No.</b>	02
<b>Disclaimer</b>	<p>This product is subject to Greenfield Global Inc.'s terms and conditions, which can be found at <a href="http://www.greenfield.com/tc-po-can/">http://www.greenfield.com/tc-po-can/</a>. The information in this SDS is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the material and not as a guarantee of the properties thereof. No warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy itself as to the suitability of such information for its own particular use. This information relates only to the specific product designated and may not be valid for such product used in combination with any other materials or in any process. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations applicable to the use, storage, or handling of the product. THE COMPANY MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF PERFORMANCE, OR USAGE OF TRADE, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. Given the variety of factors that can affect the use and application of the product, which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to independently determine whether it is fit for a particular purpose, suitable, safe, and/or lawful for user's method of use or application.</p>