



Earth Friendly

ECOFLAME

NON TOXIC

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY INFORMATION

Product Name: Ecoflame Warming and Cooking Gel
Chemical Family: Alcohol Gel
Manufacturer: Ecoflame International Inc.
 2120 Queen Street East, Suite 300, Toronto, ON M4E 1E2
Phone Number: (416) 694-7587
24-hour Emergency: In USA: CHEMTREC: (800) 424-9300
 In Canada: CANUTEC: (613) 996-6666
 In Europe: CHEMTREC (703) 527-3887 (Collect Calls Accepted)



2. COMPOSITION AND INGREDIENT INFORMATION

Common Name	Chemical Name	CAS No.	EINECS / ELINCS	Wt.%	Symbol	R Phrases
Sugar Cane Ethanol	Ethanol	64-17-5	200-578-6	60-80	F	R:11

Note: See Section 8 of this MSDS for exposure limit data for these ingredients. See Section 16 for the full text of the R-phrases above.

3. HAZARDS IDENTIFICATION

Hazards: Highly flammable. Irritating to the eyes.
Appearance, Colour and Odour: Transparent, colourless gel, alcohol odour
Primary Route(s) of Exposure: Skin, Inhalation

Potential Health Effects:

ACUTE (short term): See Section 8 for exposure controls.

Eyes: Direct contact is irritating to eyes. High vapour concentrations may cause mild irritation. Because of the gel state of this product, direct contact with eyes is unlikely.

Skin: Direct contact may cause mild irritation.

Inhalation: No acute effects are expected. Products of combustion are not expected to be harmful.

Ingestion: Not a likely route of exposure. Ingestion of ethanol causes depression of the central nervous system with symptoms such as lack of coordination, impaired vision, reduced reaction time, slurred speech, impaired judgement, nausea/vomiting and unconsciousness when ingested in large amounts.

CHRONIC (long term): See Section 11 for additional toxicological data.

Sensitisation: Not sensitizing.

Teratogenicity: Not applicable.*

Reproductive Toxicity: Not applicable.*

Mutagenicity: Not applicable.*

Toxicologically Synergistic Materials: Not applicable.*

* Prolonged or repeated exposure to ethanol through Ingestion or inhalation has known chronic effects however, it is very unlikely that this product will be ingested or inhaled in harmful amounts when used for its intended purpose.

Medical Conditions Aggravated by Exposure: Not available

Ecoflame
International Inc.

4. FIRST AID MEASURES

Inhalation: Remove affected person to fresh air. If not breathing give artificial respiration. Obtain medical attention if symptoms persist or if breathing is affected.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, or until the chemical is removed, while holding the eyelid(s) open. Obtain medical attention if irritation persists.

Skin Contact: No health effects expected. If contact occurs, flush with lukewarm, gently flowing water for 5 minutes or until the chemical is removed.

Ingestion: DO NOT INDUCE VOMITING. NEVER give anything by mouth if the victim is rapidly losing consciousness, is unconscious or is convulsing. Have victim drink 240 to 300 mL (8 to 10 oz.) of water to dilute material in the stomach. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention immediately.

5. FIRE FIGHTING MEASURES

Flash Point and Method (°C):

13°C (55°F) Tag Closed Cup

Flammability Limits (%):

Lower 3.5% (by volume) Upper 19% (by volume)

Auto Ignition Temperature (°C):

425°C (797°F)

Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. For large fires, use carbon dioxide, dry chemical powder, alcohol-resistant foam or polymer foam. Water may be ineffective because it will not cool the alcohol below its flash point. Use water spray to cool fire-exposed containers

Unusual Fire and Explosion Hazards: Closed cans exposed to flame and heat may rupture violently, scattering burning fragments.

Sensitivity to Static Discharge: Mixtures of ethanol vapour and air at concentrations in the flammable range may be ignited by a static charge of sufficient energy.

Sensitivity to Mechanical Impact: Not sensitive

Fire Fighting Instructions: Self-contained breathing apparatus and protective clothing should be worn when fighting ethanol fires. Do not use a high-pressure stream of water to extinguish burning materials.

Hazardous Combustion Products: In conditions where there is insufficient oxygen and burning is slow and incomplete, combustion may produce carbon monoxide.

Other Flammability Information: Not available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear protective equipment and ventilate the area.

Air Release: Shut off or extinguish all sources of ignition. Ventilate the area.

Land Spill: Shut off or extinguish all sources of ignition. Immediately soak spilled material with water. Soak up spill with absorbent material which does not react with spilled chemical.

Put material in suitable, covered, labelled containers. Prevent any runoff from entering sewers or waterways. Contaminated absorbent material may pose the same hazards as the spilled product.

Water Spill: Not available

7. HANDLING AND STORAGE

Storage Temperature: Store in a cool place.

Storage Pressure: Not available

General: Store in a cool place away from heat and ignition sources, and out of direct sunlight. Keep containers closed when not in use. Provide access aisles between each two rows of pallets or eight boxes. Check for signs of spillage or leakage. Packages presenting problems should be immediately removed. Do not ingest. Avoid contact with skin and eyes. Keep away from children. Keep away from combustible items like paper napkins and plates. Before lighting the can of fuel, place the can in a fuel holder or under the chafer dish first. Ensure that the can is in a level, upright position.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredient	ACGIH TLV (8-hr. TWA)	U.S. OSHA PEL (8-hr. TWA)	Ontario (Canada) TWA EV (1000 ppm)	UK OEL (8-hr. TWA)
Ethanol	1000 ppm (1000 ppm)	1900 mg/m ³ (1000 ppm)	1900 mg/m ³ (1000 ppm)	1920 mg/m ³

Engineering Controls: Provide adequate ventilation to keep vapour concentrations below the exposure limits listed above. When there is large scale use of this material, local exhaust ventilation with or without process enclosure may be necessary. Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems.

Hygiene Measures: Avoid contact with skin and eyes. Keep container tightly closed when not in use.

Personal Protective Equipment:

Respiratory Protection: Not required for normal use. NIOSH approved respirator for organic vapours in high vapour concentrations.

Skin Protection: Not required for normal use. Wear rubber, Viton[®] or 4H[®] protective gloves to prevent repeated and/or prolonged skin contact.

Eye Protection: Not required for normal use. Wear chemical safety goggles when exposure may be prolonged or if handling large quantities of the gel.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid, gel

Vapour Pressure (mm Hg @ 20°C): Not available

Appearance: Transparent, colourless gel

Vapour Density (Air = 1): Not available

pH: 6.5 - 7.0

Solubility in Water: Slight

Specific Gravity (water = 1): Not available

Water / Oil distribution coefficient: Not available

Boiling Point: Not available

Odour Type: Alcohol

Freezing Point: Not available

Evaporation Rate (n-Butyl Acetate = 1): Not available

Viscosity: Not available

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperature and pressure.

Incompatible Materials and Conditions to Avoid:

Avoid heat and open flames. Avoid contact with the following incompatible materials: Strong oxidizing agents, acids, ammonia, hydrazine, peroxides, sodium, potassium acid anhydrides, perchloric acid and metal perchlorates, silver nitrate, mercuric nitrate, potassium-tert-butoxide, acid chlorides.

Hazardous Decomposition Products: None known

Hazardous Polymerization: Does not occur.

Other Reactivity Concerns: None

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: The table below indicates whether or not each agency has listed each ingredient as a carcinogen.

Ingredient	ACGIH	IARC	NTP
Ethanol	A4	Not listed*	Not listed

Not Classifiable as a Human Carcinogen

* Occupational exposure to ethanol has not been associated with carcinogenicity.

Acute Toxicity Data:

Ingredient	LD50 Oral (mg/kg)	LD50 Dermal (mg/kg)	LC50 Inhalation (mg/m ³ , 4 hrs.)
Ethanol	7060 (rat)	Not available	39 000 (mouse)

12. ECOLOGICAL INFORMATION

General: When released into water ethanol will volatilize and biodegrade quickly. Ethanol is not expected to bio-concentrate or absorb to aquatic sediments.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

DO NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage.

USA: US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Dispose of in accordance with local, state and federal laws and regulations.

Canada: Dispose of in accordance with local, provincial and federal laws and regulations.

EU: Waste must be disposed of in accordance with relevant EU Directives and national, regional and local environmental control regulations. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

14. TRANSPORT INFORMATION

U.S. Hazardous Materials Regulation (DOT 49CFR)

As packaged this material can be shipped as a "Consumer Commodity ORM-D" Exemption. Shipments from the US going to Canada may transport as per 49 CFR (TDG Section 9.1)

DOT: FLAMMABLE SOLID, ORGANIC, N.O.S. (Ethanol), 4.1, UN1325, III

Reportable Quantity for US Shipments: None

DOT Special Provisions: A1, IB8, IP2, IP4, T3, TP1

DOT Packaging Exceptions: 173.151

DOT Non-bulk Packaging: 173.212

DOT Bulk Packaging: 173.240

Canadian Transportation of Dangerous Goods (TDG):

As packaged this material can be shipped as a "Consumer Commodity" as per part 1.17 of the TDG Regulations. Shipments from Canada to the US may transport as per TDG Regulations (49 CFR Part 171.12a).

TDG: FLAMMABLE SOLID, ORGANIC, N.O.S.

(Ethanol), Class 4.1, UN1325, PG III

ADR/RID: FLAMMABLE SOLID, ORGANIC,

N.O.S. (Ethanol), 4.1, UN1325, III

IMDG: FLAMMABLE SOLID, ORGANIC, N.O.S.

(Ethanol), 4.1, UN1325, III

Marine Pollutants: Not applicable

ICAO/IATA: FLAMMABLE SOLID, ORGANIC,

N.O.S. (Ethanol), 4.1, UN1325, III

IATA Packing Instructions:

Passenger/Cargo: 419

Cargo Only: 420

Limited Quantity: Y419

Maximum Net Quantity per Package:

Passenger/Cargo: 25 kg

Cargo Only: 100 kg

Limited Quantity: 10 kg

15. REGULATORY INFORMATION

HMIS and NFPA Hazard Rating:

Category	HMIS	NFPA
Acute Health	1	1
Flammability	3	3
Reactivity	0	0

USA

TSCA Status: Ethanol is listed on the TSCA inventory.

SARA Title III: Ethanol, CAS # 64-17-5:
acute, chronic, flammable

Sec. 313: Not applicable

CERCLA: Not applicable

Right to Know: Ethyl alcohol can be found on the following state right to know lists:
California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Clean Air Act: Not applicable

Clean Water Act: Not applicable

CANADA

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

WHMIS Classification:

B4 – Flammable Solid

D2B – Material Causing Other Toxic Effects (toxic)
Eye irritation

NSNR Status

(New Substance Notification Regulations):

Ethanol is listed, as required, on Canada's Domestic Substances List.

NPRI Substances

(National Pollutant Release Inventory):

There are no NPRI reportable ingredients.

EU

Classification:

Symbol: Highly Flammable

Risk Phrases: R:11 Highly Flammable

Safety Phrases:

S:(2-)7-16 Keep out of reach of children.

Keep container tightly closed.

Keep away from sources of ignition - No smoking.

16. OTHER INFORMATION

Full Text of R-phrases appearing in Section 2:

R11 - Highly Flammable

Text of classifications appearing in Section 2:

F - Highly Flammable

Preparation Information:

Preparation date:

April 28, 2007

Manufacturer Disclaimer:

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