



Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

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IDENTITY Green Plus Diesel Fuel Enhancer	<i>Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.</i>
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Section I	
Manufacturer's name: Biofriendly Corporation	Emergency Telephone Number: (626) 303-6000
Address (Number, Street, City, State and ZIP Code) 622 Terrado Dr Monrovia, CA 91016	Telephone Number for Information (626) 303-6000
NFPA Health: 1 Flame: 3 Reactivity: 0	Date Prepared 10/06/05
DOT Designation Isopropyl Alcohol, 3.3, UN1219, PGII	Signature of Preparer (optional) <i>Colin K. Hill</i>

Section II—Hazardous Ingredients/Identity Information				
Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA	ACGIH	Other Limits Recommended	% (optional)
Isopropyl Alcohol	PEL	TLV	N/A	99.8%
Trace amounts of proprietary materials,	PEL	TLV	N/A	trace

Section III—Physical/Chemical Characteristics			
Boiling Point	82°C	Specific Gravity (H2O = 1)	0.78
Vapor Pressure (mm Hg)	32.4mm Hg	Melting Point	-80°C
Vapor Density (AIR = 1)	2.1	Evaporation Rate (Butyl Acetate = 1)	ca3
Solubility in Water	100%		
Appearance and Odor Clear, Yellow or Green liquid with a slight alcohol odor			

Section IV—Fire and Explosion Hazard Data			
Flash Point (Method Used)	Flammable Limits	LEL	UEL
12°C (T.C.C)	In Air	2.0%	12%
Extinguishing Media Carbon Dioxide, dry chemical, alcohol foam, water mist or fog			
Special Fire Fighting Procedures Wear full protective clothing and self-contained breathing apparatus. Heat will build pressure and Rupture closed storage containers. Keep fire exposed containers cool with water spray.			
Unusual Fire and Explosion Hazards Volatile and Flammable			
(Reproduce locally)		OSHA 174 Sept. 1985	

Section V—Reactivity Data

Stability	Unstable	Conditions to Avoid
	Stable	N/A
	X	

Incompatibility (Materials to Avoid)

N/A

Hazardous Decomposition or Byproducts

N/A

Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur	N/A
	X	

Section VI—Health Hazard Data

Route(s) of Entry	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

Isopropanol which is 99% of the product, is not listed as a carcinogen by the IARC, OSHA or ACGIH. Green Plus gave negative results in the Ames tester strain testing confirming it is not mutagenic.

Carcinogenicity	NTP?	IARC Monographs?	OSHA Regulated?
	None	No	Yes

Signs and Symptoms of Exposure

Inhalation:

Can cause shortness of breath, coughing, dizziness and intoxication.

Eye Contact:

Liquid and high vapor concentration can cause burning, watering, swelling and redness.

Skin Contact

Extensive and repeated and/or prolonged skin contact can cause moderate burning, itching, redness and dermatitis.

Ingestion

Causes burning of the intestinal tract and toxic effects. Swallowing more than 250 ml (8.5 oz) of Isopropanol can cause death.

Effects of Overexposure

Isopropyl Alcohol is a mild eye and mucous membrane irritant and central nervous system depressant. Acute exposure can cause gastrointestinal tract upset and narcosis.

Medical Conditions Generally Aggravated by Exposure

Preclude from exposure those individuals susceptible to dermatitis.

Emergency and First Aid Procedures

Isopropyl Alcohol is a mild eye and mucous membrane irritant and central nervous system depressant. Acute exposure can cause gastrointestinal tract upset and narcosis.

Section VII—Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Dilute with Water

Waste Disposal Method

Can be disposed of in a regular drain diluted with at least 10 times water.

Precautions to Be Taken in Handling and Storing

We recommend wearing gloves or latex gloves. Wear a mask if you are allergic to vapors.

Other Precautions

Product is flammable, keep away from naked flame.

Section VII—Control Measures

Respiratory Protection (*Specify Type*)

Use approved respirator equipment. Follow NIOSH and equipment manufacturers recommendations to determine appropriate equipment (Air purifying, Air supplied or self-containing breathing apparatus).

Ventilation	Local Exhaust	Special
Required	The choice of ventilating equipment either local or general will depend upon the condition of use, quantity of material and other operating parameters.	No special equipment required
	Mechanical (<i>General</i>)	Other
	No Mechanical equipment is required for use.	Individuals who are acutely and specifically sensitive to isopropyl alcohol may require additional protective equipment.

Protective Gloves

Protective gloves and clothing are recommended. The choice of materials must be based on chemical resistance and other user requirements. Generally, neoprene, Nitrile rubber, or natural rubber, offers acceptable chemical resistance.

Eye Protection

See "Other" in column above

Other Protective Clothing or Equipment

See "Other" in column above

Work/Hygienic Practices

Wash hands with soap and water after use.