

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1. THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD). IMPORTANT: Read this MSDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT IDENTITY: FRONTIER ECO-START LIGHTER GEL
COMPANY IDENTITY: PACKAGING SERVICE CO., INC.
COMPANY ADDRESS: 1904 MYKAWA
COMPANY CITY: PEARLAND, TX 77581
COMPANY PHONE: 1-281-485-1458
CHEMTREC PHONE: 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINS:

70-80% ETHANOL (64-17-5)[200-578-6],
0- 3% CELLULOSE POWDER,
0- 2% SODIUM CHLORIDE (7647-14-5),

Number in parentheses is CAS #, number in brackets is European EC #.

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SECTION 3. HAZARDS IDENTIFICATION

RISK STATEMENTS:

R11 Highly Flammable.
R36/37/38 Irritating to eyes, respiratory system and skin.

SAFETY STATEMENTS:

S7 Keep container tightly closed.
S9 Keep container in a well-ventilated place.
S16 Keep away from sources of ignition. No smoking.

SECTION 4. FIRST AID MEASURES

EYE CONTACT: For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT: In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION: After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped give artificial respiration.

SWALLOWING: If swallowed, get immediate medical advice. Inducing vomiting may cause aspiration into the lungs.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: NFPA Class B extinguishers (Carbon Dioxide or foam) for Class I B liquid fires.

SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES: HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE. Keep container tightly closed. Isolate from oxidizers, heat, sparks, electric equipment & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES: Stop spill at source. Dike area & contain.

CLEAN-UP PROCEDURES: Clean up remainder with absorbent materials. Mop up & dispose of. Persons without proper protection should be kept from area until cleaned up.

SECTION 7. HANDLING AND STORAGE

HANDLING: Isolate from oxidizers, heat, sparks, electric equipment & open flame. Use only with adequate ventilation. Avoid breathing of vapor or spray mist. Avoid contact with skin & eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse. Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!

STORAGE: Do not store above 49 C/120 F. Store large amounts in structures made for OSHA Class I B liquids. Keep container tightly closed & upright when not in use to prevent leakage.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY EXPOSURE CONTROLS: A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION

LOCAL EXHAUST:	Necessary
MECHANICAL (GENERAL):	Acceptable
SPECIAL:	None
OTHER:	None

PERSONAL PROTECTIONS: Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES: Provide readily accessible eye wash stations & safety showers. Wash at end of each workshift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL DATA

APPEARANCE:	Gelled Liquid Green Lemon
ODOR :	
BOILING RANGE :	75 76 100* C / 167 169 212* F (*=End Point)
AUTO IGNITION TEMPERATURE :	343 C / 650 F (Lowest Component)
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	2.2 (Lowest Component)
FLASH POINT (TEST METHOD):	12 C / 54 F (TCC)
FLAMMABILITY CLASSIFICATION:	Class I B
GRAVITY @ 60 F:	
API :	36.2
SPECIFIC GRAVITY (Water=1) :	0.844
POUNDS/GALLON :	7.027
VOC'S (>0.44 Lbs/Sq In) :	74.5 Vol. % / 628.1 g/L / 5.232 Lbs/Gal
TOTAL VOC'S (TVOC) :	79.0 Vol. % / 628.2 g/L / 5.232 Lbs/Gal
NONEXEMPT VOC'S (CVOC) :	79.0 Vol. % / 628.2 g/L / 5.232 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS) :	.1 Wt. % / .8 g/L / 6.903 Lbs/Gal
VAPOR PRESSURE (mm of Hg)@20 C	33.7
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	26.9
VAPOR DENSITY (air=1):	1.2
WATER ABSORPTION :	Appreciable
REFRACTIVE INDEX :	1.358

SECTION 10. STABILITY & REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Isolate from oxidizers, heat, sparks, electric equipment & open flame.

MATERIALS TO AVOID: Isolate from strong oxidizers such as permanganates,chromates & peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Hydrogen Chloride, Phosgene, Carbon Oxides from burning.

HAZARDOUS POLYMERIZATION: Will not occur.

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SECTION 11. TOXICOLOGICAL INFORMATION

MATERIAL	CAS #	TWA (OSHA)	TLV (ACGIH)	HAP
Ethanol	64-17-5	1000 ppm	1000 ppm A4	No
Cellulose Powder		None Known	None Known	No
Sodium Chloride	7647-14-5	None Known	None Known	No

Each component showing 'Yes' under "HAP" is an EPA Hazardous Air Pollutant.

MATERIAL	CAS #	CEILING	STEL (OSHA/ACGIH)
		None Known	None Known

ACUTE HAZARDS

EYE & SKIN CONTACT: Primary irritation to skin, defatting, dermatitis. Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION: Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause damage to kidneys,blood,nerves,liver & lungs.

SWALLOWING: Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SUBCHRONIC HAZARDS/CONDITIONS AGGREGATED

CONDITIONS AGGREGATED: Chronic overexposure can cause damage to kidneys, blood, nerves, liver & lungs. Persons with severe skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS: This product has no carcinogens listed by IARC,NTP,NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus.

SECTION 12. ECOLOGICAL INFORMATION

MAMMALIAN INFORMATION:

MATERIAL	CAS #	LOWEST KNOWN LETHAL DOSE DATA
Ethanol (Denatured)	64-17-5	LOWEST KNOWN LD50 (ORAL) 7800.0 mg/kg(Rats)
Ethanol (Denatured)	64-17-5	LOWEST KNOWN LC50 (VAPORS) 20000 ppm (Rats)

AQUATIC ANIMAL INFORMATION: No aquatic environmental information is available on this product.

MOBILITY: This material is a gelled liquid.

DEGRADABILITY: This product is partially biodegradable.

ACCUMULATION: Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If questions exist, contact the appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: UN1987, Alcohols, n.o.s., 3, , PG-II
Consumer Commodities in containers of 0.25 gallons or less may be reclassified as Consumer Commodity, ORM-D
DRUM LABEL: (FLAMMABLE LIQUID)
IATA / ICAO: UN1987, Alcohols, n.o.s., 3, , PG-II
IMO / IMDG: UN1987, Alcohols, n.o.s., 3, , PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 127

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SECTION 15. REGULATORY INFORMATION

EPA REGULATION: SARA SECTION 311/312 HAZARDS: Acute Health, Chronic Health, Fire

All components of this product are on the TSCA list. SARA Title III Section 313 Supplier Notification. This product contains the indicated <> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	WT. %	(REG. SECTION)	RQ(LBS)
Ethanol	64-17-5	<80	(311,312)	None

STATE REGULATIONS: THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

INTERNATIONAL REGULATIONS: The components of this product are listed on the chemical inventories of the following countries: Australia, Canada, Europe (EINECS), Japan, Korea, United Kingdom.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NFPA): 1 HEALTH (HMIS): 1 FLAMMABILITY: 3 REACTIVITY: 0

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING: Employees should be made aware of all hazards of this material (as stated in this MSDS) before handling it.

NOTICE: The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process. Unless modified earlier this MSDS is effective until 3/02/2011