

# AVENTINE RENEWABLE ENERGY, INC.

1300 S. SECOND ST.  
PEKIN, IL 61554

## MATERIAL SAFETY DATA SHEET

NOTE: Read and understand Material Safety Data Sheet before handling or disposing of product.

### 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.

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.

### SECTION I - Product and Company Identification

#### MATERIAL IDENTITY

Product Name: Fuel-Grade Alcohol

Date Prepared: 06/03/2006

Product Code: 92223

Manufacturer's Name and Address:

Aventine Renewable Energy, Inc.  
1300 South Second St.  
Pekin, IL 61554

Telephone Numbers:

-Chemtrec : (800) 424-9300  
-Company : (309) 347-9200

SECTION II - Hazardous Ingredients / Identity Information				
HAZARDOUS COMPONENTS (Specific Chemical identity: Common Name(s) )	OSHA PEL (ppm)	ACGIH TLV *	CAS NO.	% (optional)
Ethyl alcohol	1000	1000	64-17-5	93-99
C4 & Aromatics	N.A.	N.A.	Mixture	1 - 5
Methyl-t-butyl ether	N.A.	40	1634-04-4	<1
* = parts per million (ppm)				

SECTION III - Physical/Chemical Characteristics			
Boiling Point	78° C	Specific Gravity (H <sub>2</sub> O = 1)	.789 @ 20° C
Vapor Pressure (mm Hg.)	44 @ 20° C	Melting Point	-114° C
Vapor Density (AIR = 1)	1.59	Evaporation Rate (Butyl Acetate = 1)	2.1
Solubility in Water : > 10% by weight at 20° C - Complete			
Appearance and Odor: Colorless liquid with gasoline odor			

SECTION IV - Fire and Explosion Hazard Data			
Flash Point (Method Used) -5° F Tag Closed Cup	Auto ignition Temp: 793° F	Flammable Limits LEL: 3.3%	In Air: UEL : 19%
Extinguishing Media: Dry chemical, "alcohol resistant" foam, carbon dioxide and water for small fires.			
Special Fire Fighting Procedures: Use alcohol-compatible foam, water may be ineffective on flames but may be used to cool fire-exposed container. Wear self-contained Breathing Apparatus (SCBA) when fighting fire in a confined space.			
Unusual Fire and Explosion Hazards: Flame is invisible in daylight. Extremely flammable materials may release vapors that are heavier than air and travel long distance, ignite and flash back.			

N.A. = NOT APPLICABLE  
N/A = NOT AVAILABLE

SECTION V - Reactivity Data			
Stability	Unstable		Conditions to Avoid: High heat, sparks, and hot metal surfaces.
	Stable	X	
Incompatibility (Materials to Avoid): May react vigorously with heat, oxidizing materials, such as nitrates, peroxides and acids.			
Hazardous Decomposition or Byproducts: Combustion may produce carbon monoxide, carbon dioxide, aldehydes and ketones.			
Hazardous Polymerization	May Occur		Conditions to Avoid: N.A.
	Will Not Occur	X	
SECTION VI - Health Hazard Data			
Route(s) of Entry :	Inhalation: Yes	Skin: No	Ingestion: Yes
<p>Health Hazards: <u>Acute Effects of Overexposure</u>: The solvent in this product, when inhaled or absorbed in harmful quantities, may produce central nervous system depression characterized by headaches, nausea, dizziness, loss of balance and coordination, and stupor. Vapors or spray mists may be irritating to nasal and respiratory tract. Product may be irritating to skin and eyes resulting in redness, itching or burning. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia.</p> <p><u>Chronic Effects of Overexposure</u>: Contact, especially if prolonged or repeated may cause redness, itching, or blistering of the skin.</p>			
Carcinogenicity :	NTP: No	IARC Monographs: No	OSHA Regulated: No
Signs and Symptoms of Exposure: Central nervous system reactions including nausea, dizziness, headaches and stupor of speech.			
Medical Conditions Generally Aggravated by Exposure: Existing respiratory disorders and skin diseases may be aggravated by exposure.			
<p>Emergency and First Aid Procedures:</p> <p>SKIN: Wash skin thoroughly with soap or mild detergent. Apply a skin cream with lanolin. If irritation occurs get medical attention.</p> <p>EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention at once.</p> <p>INHALATION: Move exposed person to fresh area. If not breathing give artificial respiration. Get medical attention immediately.</p> <p>INGESTION: If swallowed do not induce vomiting. If vomiting occurs, keep head below waist level. Get medical attention immediately.</p>			
SECTION VII - Precautions for Safe Handling and Use			
Steps to Be Taken in case Material is Released or Spilled : Eliminate all sources of ignition, contain small spill with inert absorbent material and clean up with non-sparking tools. For larger spills flush with water to reduce the potential for fire hazard. Remove liquid to suitable containers by pump.			
Waste Disposal Method : Disposal must be in accordance with applicable Federal, State, or Local regulations.			
Precautions to Be Taken in Handling and Storing : Do not store at temperature above 120° F or in direct sunlight. Do not puncture or incinerate containers. Ground and cross bond all containers when pouring or transferring. Avoid prolonged or repeated contact. Store away from Heat, Sparks and Flame.			
Other Precautions : Do not weld on empty containers unless the containers have been triple rinsed.			
SECTION VIII - Control Measures			
Respiratory Protection (Specify Type) : Air-purifying respirators with cartridges for organic vapors.			
Ventilation	Local Exhaust: For airborne concentrations above 1000 ppm.		
	Mechanical (General) : Yes	Other: N.A.	
Protective Gloves : Impervious gloves (Neoprene)	Eye Protection : Safety Goggles		
Other Protective Clothing or Equipment : Eye baths and safety showers are recommended.			
Work/Hygienic Practices : Check atmosphere for explosiveness and oxygen deficiency.			

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