

## 1. Identification

### 1.1. Product identifier

**Product Identity**

Ethanol

**Alternate Names**

Denatured Fuel Ethanol; Ethyl Alcohol, Ethanol

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**

Fuel/Fuel Additive

### 1.3. Details of the supplier of the safety data sheet

**Company Name**

Guttman Renewables  
200 Speers Street  
Belle Vernon, PA 15012  
United States  
[www.guttmanenergy.com/renewables](http://www.guttmanenergy.com/renewables)  
[safety@guttmanenergy.com](mailto:safety@guttmanenergy.com)

**Emergency****24 hour Emergency Telephone No.**

1-800-535-5053 - INFOTRAC

**Customer Service: Guttman Renewables**

## 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

Flam. Liq. 2;H225

Highly Flammable liquid and vapor.

Skin Irrit. 3;H316

Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).

Muta. 1B;H340

May cause genetic defects.

Carc. 1A;H350

May cause cancer.

STOT RE 1;H372

Causes damage to organs through prolonged or repeated exposure. Specific Target Organs: (blood system)

### 2.2. Label elements

**Danger**

H225 Highly flammable liquid and vapor.

H316 Causes mild skin irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

**[Prevention]**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

P233 Keep container tightly closed.

- P240 Ground, bond container and receiving equipment.
- P241 Use explosion-proof electrical, ventilating, light, equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust, fume, mist, vapors or spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves, eye protection, face protection.

**[Response]**

- P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.
- P308+313 IF exposed or concerned: Get medical advice or attention.
- P314 Get Medical advice or attention if you feel unwell.
- P332+313 IF SKIN IRRITATION OCCURS: Get medical advice or attention.
- P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

**[Storage]**

- P403+235 Store in a well ventilated place. Keep cool.
- P405 Store locked up.

**[Disposal]**

- P501 Dispose of contents or container in accordance with local and national regulations.

**3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ethanol CAS Number: 0000064-17-5	75 - 100	Flam. Liq. 2;H225	----
Gasoline (natural gas), natural CAS Number: 0068425-31-0	1 - 5	Flam. Liq. 1;H224 Skin Irrit. 2;H315 Muta. 1B;H340 Carc. 1A;H350 STOT SE 3;H335 STOT RE 1;H372 Asp. Tox. 1;H304	----

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

\*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

**Section 4. First aid measures**
**4.1. Description of first aid measures**
**General**

In all cases of doubt, or when symptoms persist, seek medical attention.  
 Never give anything by mouth to an unconscious person.

**Inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Overview** Reproductive or genetic defect hazard. Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. Check section 2.2 (GHS Label Elements) for further details.

**Skin** Causes mild skin irritation. (Note: this GHS classification was not adopted by US OSHA).

## Section 5. Fire-fighting measures

### 5.1. Extinguishing media

Suitable Extinguishing Media • CAUTION: For mixtures containing a high percentage of an alcohol or polar solvent, alcohol-resistant foam may be more effective.

SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam. LARGE FIRES: Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media • Avoid using direct water stream.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Keep container tightly closed.

Ground, bond container and receiving equipment.

Use explosion-proof electrical, ventilating, light, equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

### 5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Many liquids are lighter than water. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back. Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Move containers from fire area if you can do it without risk. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective

in spill situations where direct contact with the substance is possible. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

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## Section 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Collect in flammable waste container for disposal.

### 6.3. Methods and material for containment and cleaning up

Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. All equipment used when handling the product must be grounded.

LARGE SPILLS: Dike far ahead of spill for later disposal.

LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

## Section 7. Handling and storage

### 7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Keep away from heat, sparks, and flame. Do not use sparking tools. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Do not breathe mist, vapors and/or spray. Avoid contact with skin, eyes or clothing. Wear appropriate personal protective equipment, avoid direct contact. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco..

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container. Store in a cool/low-temperature, well-ventilated place.

Incompatible materials: Incompatible with strong oxidizing agents

Check section 2.2 (GHS Label Elements) for further details. - [Storage]

### 7.3. Specific end use(s)

No data available.

## Section 8. Exposure controls / personal protection

### 8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0000064-17-5	Ethanol	OSHA	TWA 1000 ppm (1900 mg/m <sup>3</sup> )
		ACGIH	No Established Limit 1000 ppm STEL
		NIOSH	TWA 1000 ppm (1900 mg/m <sup>3</sup> )
0068425-31-0	Gasoline (natural gas), natural	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

**8.2. Exposure controls**

<b>Respiratory</b>	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
<b>Eyes</b>	Protective safety glasses recommended
<b>Skin</b>	Use neoprene or rubber gloves or PVC.
<b>Engineering Controls</b>	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
<b>Other Work Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Check section 2.2 (GHS Label Elements) for further details.

## Section 9. Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	Color: Clear, Colorless	Physical State: Liquid
<b>Odor</b>	Slight to Mild Odor	
<b>Odor threshold</b>	Not determined	
<b>pH</b>	Not Measured	
<b>Melting point / freezing point</b>	Not Measured	
<b>Initial boiling point and boiling range</b>	165 to 175 °F (73.8889 to 79.4444 °C)	
<b>Flash Point</b>	49 to 55 °F(9.4444 to 12.7778 °C)	
<b>Evaporation rate (Ether = 1)</b>	Not Measured	
<b>Flammability (solid, gas)</b>	Not Applicable	
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured	
<b>Vapor pressure (Pa)</b>	Not Measured	
<b>Vapor Density</b>	1.6 Air=1	
<b>Relative Density</b>	0.79 Water=1	
<b>Solubility in Water</b>	100% complete	
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured	
<b>Auto-ignition temperature</b>	Not Measured	
<b>Decomposition temperature</b>	Not Measured	
<b>Viscosity (cSt)</b>	Not Measured	
<b>Volatility/Vol (%)</b>	100 %	
<b>Volatile by Weight</b>	100 %	

**9.2. Other information**

No other relevant information.

## Section 10. Stability and reactivity

**10.1. Reactivity**

Hazardous Polymerization will not occur.

**10.2. Chemical stability**

Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

High temperatures and fires.

**10.5. Incompatible materials**

Incompatible with strong oxidizing agents

**10.6. Hazardous decomposition products**

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

## Section 11. Toxicological information

**Acute toxicity**

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ethanol - (64-17-5)	10,470.00, Rat - Category: NA	17,100.00, Rabbit - Category: NA	124.70, Rat - Category: NA	No data available	No data available
Gasoline (natural gas), natural - (68425-31-0)	No data available	No data available	No data available	No data available	No data available

**Carcinogen Data**

CAS No.	Ingredient	Source	Value
0000064-17-5	Ethanol	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	A3
0068425-31-0	Gasoline (natural gas), natural	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	3	Causes mild skin irritation.

Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	1B	May cause genetic defects.
Carcinogenicity	1A	May cause cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	1	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

## Section 12. Ecological information

### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ethanol - (64-17-5)	15,400.00, Lepomis macrochirus	> 10,000, Daphnia magna	17.921 (96 hr), Ulva pertusa
Gasoline (natural gas), natural - (68425-31-0)	Not Available	Not Available	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## Section 13. Disposal considerations

### 13.1. Waste treatment methods

Destroy by liquid incineration. Use absorbent material and deposit in toxic landfill in accordance with local, state, and federal regulations.

### Section 14. Transport information

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>14.1. UN number</b>	UN1987	UN1987	UN1987
<b>14.2. UN proper shipping name</b>	UN1987, Alcohols, n.o.s., 3, II	Alcohols, n.o.s.	Alcohols, n.o.s.
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> 3 <b>Sub Class:</b> Not Applicable	<b>IMDG:</b> 3 <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> 3 <b>Sub Class:</b> Not Applicable
<b>14.4. Packing group</b>	II	II	II
<b>14.5. Environmental hazards</b>	IMDG Marine Pollutant: No;		
<b>14.6. Special precautions for user</b>	Not Applicable		

### Section 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act ( TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**Note:** Ethanol (Ethyl alcohol) has been placed on the California Proposition 65 Cancer and Developmental Lists when in alcoholic beverages.

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

Ethanol

**Proposition 65 - Carcinogens (>0.0%):**

Benzene

**Proposition 65 - Developmental Toxins (>0.0%):**

Benzene

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

Benzene

**Proposition 65 Label Warning:**



WARNING: This product can expose you to chemicals including [Benzene], which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).



<b>Section 16. Other information</b>
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**Revision Date**                    09/27/2022

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

Prepared By:

Quantum Compliance

Revision Notes:

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Revised Sections:

The following sections have been updated:

Section 1 to 16

End of Document