

**Hawkeye Gold, LLC**

224 S. Bell Ave. P.O. Box 2523  
Ames, Iowa 50010-2523  
(515) 233-5577 (8am – 5pm M-F)

**24 – Hour Emergency Assistance call 1-800-424-9300 (Chemtrec)**

Note: Read and understand the MSDS before handling or disposing of the product.

**SECTION I – Product Identification / Manufacturing Locations****PRODUCT IDENTIFICATION**

Product Name: Ethyl Alcohol, Anhydrous, Denatured  
Synonyms: Fuel Ethanol, E95, E98

**MANUFACTURER NAME and ADDRESS**

Hawkeye Renewables, LLC	21050 - 140 <sup>th</sup> Street	Iowa Falls, Iowa 50441	(641) 648-8910
Hawkeye Renewables, LLC	1277 - 102 <sup>nd</sup> Street	Fairbank, Iowa 50629	(319) 635-9400
Hawkeye Menlo, LLC	3363 Talon Avenue	Menlo, Iowa 50164	(641) 524-5600
Hawkeye Shell Rock, LLC	30750 - 212 <sup>th</sup> Street	Shell Rock, Iowa 50670	(319) 885-2000
Platinum Ethanol, LLC	2585 Quail Avenue	Arthur, Iowa 51431	(712) 367-2700

**SECTION II – Hazardous Components / Identity Information**

<u>Component</u>	<u>CAS No.</u>	<u>% (By Volume)</u>	<u>OSHA PEL / STEL</u>	<u>ACGIH TLV / STEL</u>
<b>Ethyl Alcohol</b>	64-17-5	95 - 98	1000 ppm	1000 ppm
<b>Natural Gasoline</b>	68425-31-0	2- 5	300 ppm / 500 ppm	300 ppm / 500 ppm

**SECTION III – Physical Properties**

<b>Physical State</b>	Liquid
<b>Boiling Point</b>	158°F (70°C) @ 760 mm Hg
<b>Vapor Pressure</b>	5.8 kPa at 68°F (20°C)
<b>Vapor Density (air = 1)</b>	1.6
<b>Specific Gravity</b>	0.787 – 0.797 @ 60°F (15.55°C)
<b>Solubility in Water</b>	Complete
<b>Appearance and Odor</b>	Clear, colorless volatile liquid with alcohol odor
<b>Evaporation Rate (n-butyl acetate = 1)</b>	1.9

**SECTION IV – Fire Fighting and Explosion Information**

<b>NFPA 704 Rating</b>	<b>Health - 1</b>	<b>Flammability - 3</b>	<b>Reactivity - 0</b>
<b>Flash Point (Tag Closed Cup)</b>	55 °F (12.7°C)		
<b>Auto Ignition Temperature</b>	685°F (363°C)		
<b>Explosive Limits (In Air)</b>	Lower 3.3% Upper 19%		

**Extinguishing Media:** Alcohol resistant foam, dry chemical or carbon dioxide

**Fire Fighting Procedures:** Use alcohol compatible foam (AR-AFFF). Water may be ineffective on flames but may be used to cool fire exposed containers. Wear self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode when fighting fires.

**Hazardous Decomposition Products:** May form toxic materials, carbon dioxide and carbon monoxide.

**Special Fire and Explosion Hazards:** Flames are invisible in daylight. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights or other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum, even empty, because product residue can ignite explosively.

**SECTION V – First Aid**

**Skin:** If product has contacted clothing, remove the contaminated clothing as quickly as possible. Wash skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. If irritation occurs seek medical attention. Wash contaminated clothing before reusing.

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lens. Do not use an eye ointment. Seek medical attention if irritation persists after flushing eyes.

**Inhalation:** Move exposed person to fresh air. If not breathing give artificial respiration. In cases of inhalation of IDHL levels, evacuate the victim to a safe area as soon as possible. Loosen tight fitting clothing. Get medical attention immediately.

**Ingestion:** IF SWALLOWED DO NOT INDUCE VOMITTING. If the victim is conscious, give person one to two glasses of water. If vomiting occurs, keep head below waist level to avoid aspiration into the lungs. Get medical attention immediately.

**SECTION VI – Accidental Release****Steps to be taken in case of accidental release:**

**Small Spill:** Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to hood.

**Large Spill:** Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Stop spill at source, dike area or spill to prevent spreading. Pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs notify proper authorities as required that a spill has occurred.

**SECTION VII – Reactivity Data****Stability**

Stable

**Conditions to Avoid**

High heat, sparks and hot metal surfaces

**Incompatibility (Materials to Avoid)**

Strong oxidizing agents and strong inorganic acids

**Hazardous Polymerization**

Will not occur

**SECTION VIII – Handling and Storage**

Store this material away from heat, sparks and flames. Containers of this material may be hazardous when empty since emptied containers retain product residues (vapor or liquid). It is good practice to triple rinse with water empty drums. Above ground storage must meet applicable codes. Ground and cross bond all containers when pouring or transferring. All hazard precautions given in this datasheet must be observed.

**SECTION IX – Exposure Controls / Personal Protection**

**Primary routes of entry:** Ingestion, inhalation and skin contact

**Permissible Exposure Level:** See Section II.

**Effects of Acute Overexposure:**

**Eyes:** Can cause moderate irritation, redness, tearing.

**Skin:** Can cause slight irritation, redness and dryness.

**Breathing:** Excessive inhalation of vapors can cause nasal and respiratory irritation. When inhaled or absorbed in harmful quantities may produce central nervous system depression characterized by irritation, headaches, nausea, dizziness, lack of concentration, fatigue, and stupor.

**Swallowing:** Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Introduction of solvents, as in aspiration of vomit fluid, may produce chemical pneumonia.

**Effects of Chronic Overexposure:**

Overexposure to this material has been suggested as a cause of the following effects in humans: liver abnormalities and eye damage. Material can cause dermatitis of the skin on prolonged or repeated exposure. Single large doses taken into the body through ingestion may lead to alcohol poisoning.

**Signs and Symptoms of Exposure:** Central nervous system reactions including nausea, dizziness, headaches and stupor of speech associated with difficulty in walking.

**Medical conditions Generally Aggravated by Exposure:** Existing respiratory disorders and skin diseases may be aggravated by exposure.

**Carcinogenicity:** NTP – No IARC Monographs – No OSHA Regulated – No

**Respiratory Protection:** If workplace exposure limit(s) of product or any component is exceeded, (Section II) a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators, air purifying respirator with cartridges for organic vapor under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.

**Ventilation:** Provide sufficient mechanical or general ventilation to maintain exposure below limits.

**Protective Gloves:** Wear resistant gloves such as neoprene.

**Eye Protection:** Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety supplier.

**Other Protective Equipment:** To prevent repeated or prolonged skin contact, wear impervious clothing/boots. Eye wash baths and safety showers are recommended. Also check atmosphere for explosiveness and oxygen deficiency when necessary.

#### SECTION X – Waste Disposal Considerations

**Small Spill:** Allow volatile portion to evaporate in hood. Allow sufficient time for vapors to completely clear hood ductwork. Dispose of remaining material in accordance with applicable regulations.

**Large Spill:** Reclaim if Possible. Destroy by liquid incineration. Follow all applicable local, state and federal laws. Contaminated absorbent may be deposited in a landfill in accordance with local, state and federal regulations.

#### SECTION XI – Ecological Information

Not Available

#### SECTION XII – Toxicological Information

Ethyl Alcohol LD50 Acute Oral	7060 mg/kg (Rat)
Ethyl Alcohol LD50 Acute Oral	3450 mg/kg (Mouse)
Ethyl Alcohol LD50 Acute Dermal	20000 mg/kg (Rabbit)

#### SECTION XIII – Transportation Information

**DOT Classification:** FLAMMABLE LIQUID, Hazard Class 3, Packing Group II

**Placard Identification:** UN1987 Alcohols, n.o.s.(ethanol, gasoline); or NA1987 Denatured Alcohol; or UN3475, Ethanol and gasoline mixture

#### SECTION XIV – Regulatory

**SARA Section 302** (Extremely Hazardous Substance): Not Applicable

**SARA Section 313** (Toxic Chemicals): Not Applicable

**CERCLA:** Not Applicable

**CAA 112 (r):** Not Applicable

**RCRA:** Not Applicable

#### SECTION XV – Other

This MSDS complies with 29 CFR 1910.1200 (Hazardous Communication Standard)

The information accumulated herein is believed to be accurate, but is furnished without warranty of any kind. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances in order to assure proper use of this material and the safety and health of employees.