



**THE ANDERSONS
SAFETY DATA SHEET**

DATE PREPARED: 01/25/07

CURRENT AS OF: 6/2/15

SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT NAME: Denatured Ethanol

PRODUCT USE: Fuel / fuel additive

MFR INFO: The Andersons Marathon Ethanol LLC
5728 East Sebring-Warner Road
Greenville, Ohio 45331

FOR EMERGENCY: (800) 757-8951

FOR INFORMATION: (419) 891-2957
(574) 753-4974

SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOLS / STATEMENTS:



DANGER

**HIGHLY FLAMMABLE LIQUID AND VAPOR
MAY BE HARMFUL IF SWALLOWED
MAY CAUSE SKIN IRRITATION
MAY CAUSE EYE IRRITATION
MAY CAUSE RESPIRATORY IRRITATION
HARMFUL TO AQUATIC LIFE
MAY CAUSE DAMAGE TO ORGANS**



HAZARD CLASSIFICATIONS:

FLAMMABLE LIQUID

ACUTE TOXICITY

SKIN IRRITATION

EYE IRRITATION

TARGET ORGAN SYSTEMIC TOXICITY

TARGET ORGAN SYSTEMIC TOXICITY

AQUATIC ENVIRONMENT

CATEGORY

2

5

3

2B

2

3

3

INTERPRETATION

Highly flammable

Low

Skin Irritation Possible

Eye Irritation Possible

Target Organ Damage Possible

Respiratory Irritation Possible

Harmful

DENATURED ETHANOL (GREENVILLE)

PRECAUTIONARY STATEMENTS:

- *STORE CONTAINER TIGHTLY CLOSED*
- *KEEP AWAY FROM HEAT / SPARKS / OPEN FLAME – NO SMOKING*
- *WEAR PROTECTIVE GLOVES AND EYE / FACE PROTECTION*
- *GROUND / BOND CONTAINER AND RECEIVING EQUIPMENT*
- *IF ON SKIN, REMOVE ALL CONTAMINATED CLOTHING -- RINSE SKIN WITH WATER / SHOWER*
- *CALL A POISON CENTER / PHYSICIAN IF UNWELL*
- *IF SKIN IRRITATION OCCURS, GET MEDICAL ADVICE*
- *IF IN EYES, RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES – REMOVE CONTACT LENSES*
- *IF EYE IRRITATION PERSISTS, GET MEDICAL ADVICE*
- *WASH HANDS AFTER HANDLING*
- *DO NOT EAT, DRINK, SMOKE WHEN USING PRODUCT*
- *USE ONLY OUTDOORS OR IN WELL VENTILATED AREAS*
- *DO NOT BREATHE MIST / SPRAY / VAPORS*
- *IF INHALED, REMOVE TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING*
- *DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH NATIONAL / REGIONAL / LOCAL REGULATIONS*

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>CHEMICAL IDENTITY</u>	<u>SYNONYM</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>
Denatured ethanol		Mixture	100.0

SECTION 4: FIRST AID MEASURES

IF INHALED:	Move victim to fresh air. Seek medical attention if irritation persists.
IF ON SKIN:	Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.
IF IN THE EYES:	Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.
IF SWALLOWED:	If victim is alert and not convulsing, give one glass of water to dilute material and induce vomiting. Seek immediate medical attention.
SPECIAL TREATMENT:	None known
HEALTH HAZARDS:	See Section 11

SECTION 5: FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:	Use film-forming foam (preferably alcohol-resistant); CO2 or dry chemical may be used on small fires.
SPECIFIC FIRE HAZARDS:	Decomposition products may be toxic; vapors can cause flashback, may settle in low or confined spaces.
SPECIAL FIREFIGHTING PROCEDURES:	Wear full protective clothing and positive-pressure self-contained breathing apparatus; use water spray to cool fire-exposed containers and structures as well as to disperse vapors.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

- SPILL / RELEASE PROCEDURES: Collect spilled product and store to re-use. Contaminated product and/or environmental media should be recovered and disposed of properly. Dike area to prevent spill from spreading. Keep out of sewers and waterways.
- ENVIRONMENTAL PRECAUTIONS: Prevent spilled material from entering storm drains or water bodies.
- PROTECTIVE EQUIPMENT: See Section 8

SECTION 7: HANDLING AND STORAGE

Store in a cool, dry, well ventilated area.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

<u>HAZARDOUS COMPONENT</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Ethyl alcohol	1000 ppm	1000 ppm
Denaturant		300 ppm 500 ppm (STEL)

PERSONAL PROTECTIVE EQUIPMENT / PROTECTION MEASURES / CONTROLS:

- RESPIRATORY PROTECTION: NIOSH approved organic vapor respirator, if required
- EYE PROTECTION: Safety glasses with sideshields, goggles, or faceshield recommended
- SKIN PROTECTION: Long sleeves, protective (rubber) gloves recommended
- VENTILATION: Local exhaust ventilation recommended

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Clear liquid with slight odor
pH:	Not available
MELTING POINT:	-179 F
BOILING POINT:	173 F
FLASH POINT:	58 F (closed cup); 70 F (open cup)
EVAPORATION RATE:	3.3 (butyl acetate = 1)
FLAMMABLE LIMITS:	3.3 – 19.0% by volume
VAPOR PRESSURE:	44 mm Hg @ 20 C
VAPOR DENSITY:	1.6 (air = 1)
SPECIFIC GRAVITY:	0.79
SOLUBILITY (IN WATER):	Soluble
PARTITION COEFFICIENT:	Not available
AUTOIGNITION TEMP:	793 F
DECOMPOSITION TEMP:	Not available
ODOR THRESHOLD:	Not available
VISCOSITY:	Not available

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SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable.

CONDITIONS TO AVOID: Excessive heat, sources of ignition

INCOMPATIBILITY: Strong oxidizers, inorganic acids

HAZARDOUS DECOMPOSITION PRODUCTS: CO_x

SECTION 11: TOXICOLOGICAL INFORMATION

HEALTH EFFECTS: Ingestion may cause dizziness, faintness, drowsiness, decreased awareness or responsiveness, central nervous system depression, headache, nausea, vomiting, impaired gait, lack of coordination, and coma. May cause burning sensation in the nose and throat as well as irritation and watering of the eyes. Skin irritation is possible. Long term, repeated exposure may result in the development of progressive liver injury.

CARCINOGENICITY: None of the ingredients are known / listed carcinogens. However, the product may contain trace amounts of benzene, ethyl benzene, and naphthalene. Benzene is listed by IARC as a human carcinogen. Ethyl benzene and naphthalene are listed by IARC as possible human carcinogens.

INGREDIENT TOXICITY RANGES:

ORAL: > 5,000 mg/kg

DERMAL: None listed

INHALATION: 30,000 mg/m³

SECTION 12: ECOLOGICAL INFORMATION

This product is potentially harmful in the aquatic environment. It is not known to be persistent or have the potential to bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all national, regional / state, and local regulations. Reuse recovered product where possible.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME: Alcohols, n.o.s.

HAZARD CLASS: 3

PACKING GROUP: II

UN / NA NUMBER: 1987

SECTION 15: REGULATORY INFORMATION

SARA SECTION 311 / 312 HAZARD CATEGORY: IMMEDIATE HAZARD

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SECTION 16: OTHER INFORMATION

NFPA RATINGS:	HEALTH	1
	FLAMMABILITY	3
	INSTABILITY	0
HMIS RATINGS:	HEALTH	2
	FLAMMABILITY	3
	PHYSICAL HAZARD	0
PREPARED BY:	SS	

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