



DATE DEC 1994

MATERIAL SAFETY DATA SHEET

SECTION I

DISTRIBUTORS NAME: CENEX, INC.
ADDRESS: PO BOX 64089, ST PAUL MN 55164-0089
TELEPHONE NO: (612) 451-5151
EMERGENCY TELEPHONE: (800) 424-9300 (CHEMTREC)
CHEMICAL NAME & SYNONYMS: ETHANOL, ETHYL ALCOHOL
TRADE NAME & SYNONYMS: FUEL ETHANOL

SECTION II INGREDIENTS & HAZARDS

This material is hazardous as defined by OSHA's Hazard Communication Standard 29 CFR 1910.1200.

	<u>CONCENTRATION %</u>	<u>C.A.S. NUMBER</u>
Hazardous Ingredients:		
Ethanol	95	64-17-5
Gasoline (Unleaded)	5	8006-61-9
Hazardous Physical Properties:		
Flammable Liquid		

SECTION III PHYSICAL DATA

Boiling Point (F.): 173 Typical (Ethanol)
Vapor Pressure @ 68 F. (mmHg): 45
Solubility In Water: Complete
Specific Gravity: 0.79
Percent Volatile: 100
 (By Volume %)
Vapor Density (Air=1): >1
Appearance & Odor: Clear mobile liquid; characteristic alcohol odor.

2780

SECTION IV FIRE & EXPLOSION DATA

Flash Point (F.): Below -5

Autoignition Temp (F.): Not Determined

Flammability Limits: LEL 3.3%
UEL 19.0%

Extinguishing Media: CO2, dry chemical, foam, water spray.

Special Fire Fighting Procedures: Water is not effective until the alcohol contains approximately 80% or more water.

Unusual Fire & Explosion Hazards: Flammable liquid. Vapors are heavier than air and may travel some distance to an ignition source and flash back.

NFPA Rating: Health 1 Fire 3 Reactivity 0

SECTION V HEALTH HAZARD DATA

Primary Route(s) of Exposure/Entry: Inhalation, Skin

TLV-TWA: 1000 ppm (Ethanol) ACGIH

PEL: 1900 mg/m³ (Ethanol) OSHA, 300 ppm (Gasoline) OSHA

Not for human consumption (contains gasoline). Harmful or fatal if swallowed! Harmful vapors. Can cause lung damage. May cause eye and skin irritation. Extremely flammable!

Eye irritation potential has not been determined. It could cause prolonged vision impairment. Prolonged or frequent contact may cause skin irritation. May include pain, discoloration, swelling, and blistering. However, it is considered practically non-toxic to internal organs via skin contact. This alcohol product is denatured and therefore not fit for consumption. Ingestion can cause loss of co-ordination, loss of appetite, headache, dizziness, and loss of consciousness. Breathing vapors at concentrations above exposure limits can cause CNS effects including dizziness, weakness, headache, loss of appetite and co-ordination.

This material is not listed as a carcinogen by the NTP, IARC or OSHA. However, this product contains benzene which is listed as a carcinogen by the NTP and OSHA.

SECTION VI EMERGENCY & FIRST AID INFORMATION

EYE CONTACT: Immediately flush with water for 15 minutes while holding open eyelids. If irritation develops, contact a physician.

SKIN CONTACT: Remove contaminated clothing. Wash skin with soap and warm water. If irritation develops, contact a physician.

INHALATION: Move victim to fresh air. Contact a physician. If breathing has stopped, start artificial respiration.

INGESTION: Give two glasses of milk or water to dilute if conscious. Never give anything by mouth to an unconscious person. Contact poison control center or physician. Do not induce vomiting unless instructed to do so.

SECTION VII REACTIVITY DATA

This is a stable material in closed containers under normal storage and handling conditions. It does not undergo hazardous polymerization.

Material is incompatible with strong oxidizers, strong acids and bases.

SECTION VIII SPILL OR LEAK PROCEDURES

Immediately remove all sources of ignition. Provide maximum natural and/or mechanical explosion-proof ventilation. Wear all appropriate personnel protective equipment. Dike ahead of flow with inert material (sand, earth, clay, floor dry, etc.) to contain material. Transfer liquid and diking material to separate containers for disposal using explosion-proof/non-sparking tools. Stop release if it can be done without undue risk. Report spills to appropriate local, state, and federal authorities. Follow all applicable disposal regulations.

SECTION IX SPECIAL PROTECTION INFORMATION

Danger! FLAMMABLE LIQUID! Provide ventilation and eliminate ignition sources in use area. The use of safety goggles or face shield is recommended where splashing is a possibility. Use body-covering work clothing, apron, and rubber gloves to minimize skin contact. Additional ventilation or exhaust may be required to meet TLV air concentrations. Use explosion-proof equipment. If air concentrations exceed exposure limits, use NIOSH approved supplied air respirator. A source of clean water should be available in the work area for flushing eyes and skin.

SECTION X TRANSPORTATION, STORAGE, SPECIAL PRECAUTIONS & COMMENTS

Storage Information: Store separate from oxidizing agents, storing acids and bases in a cool, dry, well ventilated area away from heat, direct sunlight, and all sources of ignition. Post area NO SMOKING OR OPEN FLAME. Keep containers closed. Bond and ground all equipment when transferring from one vessel to another to prevent static charge. The use of explosion proof equipment may be required (check fire codes). Protect containers from physical damage. Outdoor or detached storage is preferred. Indoor storage must meet OSHA standards and fire codes. Do not enter confined spaces without following proper entry procedures. Empty containers retain residue and may exhibit hazards of the material. Do not pressurize, cut, weld, solder, drill, grind or expose such containers to any ignition source. Empty drums should be completely drained, bunged and shipped to the supplier or drum reconditioner.

Proper Shipping Name: Flammable Liquid, N.O.S. (contains ethyl alcohol, gasoline)

Hazard Class: 3

UN/NA No: UN 1993

PG: II

DOT Label: Flammable Liquid

DOT Placard: Flammable

SECTION XI REGULATORY INFORMATION, (NOT ALL INCLUSIVE)

SARA Title III Sections 302, 304, 311, 312, 313.

Section 302/304-Extremely Hazardous Substances (40 CFR 355) this material is not known to contain greater than 1.0% of any extremely hazardous substance. Section 311/312 MSDS and OSHA's Hazard Communication Standard (40 CFR 370). Under OSHA's Hazard Communication Standard (29 CFR 1910.1200) this product should be reported under the following EPA hazard categories:

- Acute (immediate) Health Hazard
- Chronic (delayed) Health Hazard
- Fire
- Sudden Release of Pressure
- Reactive
- Not Applicable

Section 313 Toxic Chemical Components (40 CFR 372). This product contains the following chemicals at a concentration of 1.0% or greater if hazardous (0.1% or greater for carcinogens) identified as toxic and is subject to toxic chemical release reporting requirements.

<u>Component</u>	<u>C.A.S. No</u>	<u>Approx Percent</u>
Benzene	71-43-2	0.25

The chemical ingredients in this material are on the U.S. Toxic Substance Control Act inventory and/or otherwise are in compliance with TSCA.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the result to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

