OUR ENERGY COMES THROUGH.

MATERIAL SAFETY DATA SHEET

Section 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Manufacturer/Supplier:
Cenex, a division of CHS Cooperatives
P.O. Box 64089
Mail station 525
St. Paul, MN 55164-0089

Transportation Emergency (CHEMTREC): 1-800-424-9300
Technical Information: 1-651-306-8443
MSDS Information: 1-651-306-8438

PRODUCT NAME: LP GAS METHANOL
COMMON NAME:
CHEMICAL NAME: Methanol, Methyl Alcohol
Wood Alcohol, Anhydrous Methyl Alcohol

MSDS: 0140-J4X0 - Rev. C (10/29/01)
CHEMICAL FORMULA: Mixture
CHEMICAL FAMILY:

Section 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENTS	PERCENTAGES (by weight)	PEL (OSHA)	TLV (ACGIH)	CAS #
Hazardous Ingredients:				
Methanol (CH3OH)	100	200 ppm or 260 mg/m3 STEL: 250 ppm or 325 mg/m3 1000ppm ceiling	N/D ppm TWA	67-56-1

(TWA) - Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.
(STEL) - Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
A clear liquid with a mild alcohol odor.
This material is hazardous as defined by OSHA's Hazard Communication Standard 29 CFR 1910.1200.
Primary Hazardous Properties: Flammable. Harmful if swallowed. Poisonous. Harmful if inhaled.

POTENTIAL HEALTH EFFECTS
ROUTES OF ENTRY: Eye Contact, Dermal, Inhalation, Ingestion.

ACUTE EFFECTS OF OVEREXPOSURE:
Can not be made non-poisonous
Eyes - Minor irritation
Skin - Slight irritation
Inhalation - Inhalation of concentrated vapor or mist may irritate respiratory tract and cause headache, drowsiness, dizziness and narcosis
Ingestion - Central nervous system depression, peripheral nervous system depression, narcosis, asphyxiation, gastrointestinal disturbances. Aspiration of vomitus can cause serious pneumonitis, particularly in young children.

CHRONIC EFFECTS OF OVEREXPOSURE:.. Absorption through skin from prolonged contact may cause toxic affects. Causes harm to the fetus in laboratory animal studies. Reports have associated repeated and prolonged over-exposure with central nervous system damage, liver abnormalities, kidney damage, lung damage, and spleen damage. There is no direct evidence that this material causes skin cancer in humans. This material is not listed as a carcinogen by NTP, IARC, or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May aggravate pre-existing dermatitis or respiratory illness.

CARCINOGENICITY: **NTP:** No **IARC:** No **OSHA:** No

Section 4 - FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: If material contacts the eye, flush thoroughly with water for at least 15 minutes, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention.

Skin Contact: Remove contaminated clothing. Wash affected areas with soap and water.

Inhalation: Move person to fresh air. If a large amount has been inhaled, keep victim warm and get medical attention. Begin rescue breathing procedures if not breathing.

Ingestion: Get medical attention immediately. If victim is conscious and immediate medical help is unavailable, induce vomiting with syrup of Ipecac as directed or by gently placing two fingers in the back of the throat. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: THIS PRODUCT CONTAINS METHANOL. METHANOL IS METABOLIZED TO FORMALDEHYDE AND FORMIC ACID. THIS IN TURN MAY CAUSE METABOLIC ACIDOSIS, VISUAL DISTURBANCES AND BLINDNESS. BECAUSE METABOLISM MUST OCCUR BEFORE THE TOXIC EFFECTS, THE ONSET OF TOXIC SYMTOMS MAY BE DELAYED FROM 6 TO 30 HOURS FOLLOWING INGESTION. ETHANOL COMPETES FOR THE SAME METABOLIC PATHWAY AND HAS BEEN USED AS AN ANTIDOTE. METHANOL IS EFFECTIVELY REMOVED BY HEMODIALYSIS.

Section 5 - FIRE - FIGHTING MEASURES

FLASH POINT: 54°F (12°C) TCC **AUTO IGNITION TEMP:** N/D

FLAMMABLE LIMITS IN AIR	**LOWER**	**UPPER**
% BY VOLUME	6	36.5

EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide (CO_2), Water (fog pattern)

SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective on flames, but should be used to keep fire-exposed containers cool. Water or foam sprayed into container of hot burning product could cause frothing and endanger fire fighters. Large fires, such as tank fires, should be fought with caution. If possible, pump the contents from the tank and keep adjoining structures cool with water. Avoid spreading burning liquid with water used for cooling purposes. Do not flush down public sewers. Avoid inhalation of vapors. Fire fighters should wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground to a source of ignition (pilot light, heater, electric motor) some distance away. Containers, drums (even empty) can explode when heat (welding, cutting, etc.) is applied.

HAZARD RATINGS:				
	NFPA 704:	Health 1	Fire 3	Reactivity 0
	HMIS:	Health	Fire	Reactivity

Section 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO TAKE IF MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Notify emergency response personnel as appropriate. If facility or operation has an "Oil or Hazardous Substance Contingency Plan", "Spill Prevention Control & Countermeasures (SPCC) Plan" or equivalent, activate its procedures. Remove all sources of ignition Keep unnecessary people away; isolate hazard area and deny entry. Stop leak at source, contain spill to prevent spreading. Small spills can be removed with inert absorbent. Dike areas of large spill to prevent runoff to sewers, streams, etc. Ventilate area. Avoid breathing vapors. Use appropriate personal protective equipment during clean up. Contact fire authorities and notify appropriate Federal, State, and Local agencies.

Section 7 - HANDLING AND STORAGE

HANDLING AND STORAGE: Transport, handle and store in accordance with OSHA Regulation 29 CFR 1910.106, and applicable D.O.T. Regulations. Store in tightly closed containers in a dry cool place, away from sources of heat or ignition. Ground and bond all transfer and storage equipment and equip with self-closing valves, pressure vacuum bungs and flame arrestors. **Caution**: Misuse of empty containers can be hazardous. Empty containers can be hazardous since emptied containers retain product residue (vapor, liquid, and/or solid). Cutting or welding empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame, heat, sparks or other sources of ignition. Do not siphon methanol by mouth.

Section 8 - EXPOSURE CONTROL - PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate local or dilution ventilation to keep vapors below permissible concentrations.

RESPIRATORY EQUIPMENT: Personnel should never enter areas of high concentrations without proper respiratory protection. If exposure limits for product or components are exceeded, NIOSH-approved respiratory protection equipment should be worn. Proper selection of respirators should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. Self-contained breathing apparatus or supplied air respiratory protection required for entry into tanks, vessels, or other confined spaces containing methanol.

EYE PROTECTION: Chemical type goggles or face shield where contact with liquid or mist may occur.

PROTECTIVE CLOTHING: Wear impervious clothing and gloves when contact with skin may occur.

OTHER (SAFETY SHOWERS, EYE WASH STATIONS, ETC.): Water should be available for flushing and washing when exposure exists.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: A clear liquid.

ODOR: Alcohol odor.

BOILING POINT: 148° F

SPECIFIC GRAVITY (water=1) : 0.79

VAPOR PRESSURE: 96 mmHg @ 68°F **VAPOR DENSITY (air=1):** 1.11

SOLUBLE IN WATER: Completely soluble **EVAPORATION RATE (ether=1):** >1

pH: N/D

Section 10 - STABILITY AND REACTIVITY

STABILITY:

STABLE _X_
UNSTABLE ___

INCOMPATIBILITY:

CONDITIONS TO AVOID: Heat, flame, all ignition sources and static electricity.
MATERIALS TO AVOID: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, and other petroleum decomposition products (hydrocarbons).

HAZARDOUS POLYMERIZATION: Has not been reported to occur under normal temperatures and pressures.

Section 11 - TOXICOLOGY INFORMATION

Note: Cenex has not conducted specific toxicity tests on this product. Our hazard evaluation is based from similar ingredients, technical literature, and/or professional experience..

Section 12 - ECOLOGICAL INFORMATION

Note: Cenex has not conducted specific ecological tests on this product.

Section 13 - DISPOSAL CONSIDERATION

WASTE DISPOSAL PROCEDURES: Recycle as much of the recoverable product as possible. Do not flush to drain or storm sewer or otherwise release to the environment. Dispose of non-recyclable material according to federal, state and local regulations.

Section 14 - TRANSPORTATION

DOT PROPER SHIPPING NAME: Methanol **DOT HAZARD CLASS:** Flammable Liquid

DOT IDENTIFICATION NUMBER: UN 1230 **DOT EMER. RESPONSE GUIDE NO.:** 131

Proper Shipping Name-**Methanol**; Hazard Class- **3**; UN/NA Identification #- **UN 1230**; **Packing Group II**; Placard- **FLAMMABLE LIQUID**.

Section 15 - REGULATORY INFORMATION

This product contains the following toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

CAS Number	Chemical Name	Percent by Weight
67-56-1	Methanol	100

SARA SECTION 311-312 HAZARD CATEGORIES (40 CFR 370.2):

FIRE: Yes **SUDDEN RELEASE OF PRESSURE:** No **REACTIVE:** No **ACUTE:** Yes **CHRONIC:** Yes

Section 16 - OTHER INFORMATION

Prepared By: Hue Lam DATE: October 29, 2001

Title: EHS Compliance Specialist Supersedes: Rev. B, 11/22/00

Reason for Issue: Company Name Change

THE INFORMATION CONTAINED IN THIS MSDS RELATES ONLY TO THE SPECIFIC MATERIAL IDENTIFIED. IT DOES NOT COVER USE OF THAT MATERIAL IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PARTICULAR PROCESS. IN COMPLIANCE WITH 29 C.F.R. 1910.1200(g), CENEX HAS PREPARED THIS MSDS IN SEGMENTS, WITH THE INTENT THAT THOSE SEGMENTS BE READ TOGETHER AS A WHOLE WITHOUT TEXTUAL OMISSIONS OR ALTERATIONS. CENEX BELIEVES THE INFORMATION CONTAINED HEREIN TO BE ACCURATE, BUT MAKES NO REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESS OR IMPLIED, ABOUT THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION OR ABOUT THE FITNESS OF CONTENTS HEREIN FOR EITHER GENERAL OR PARTICULAR PURPOSES. PERSONS REVIEWING THIS MSDS SHOULD MAKE THEIR OWN DETERMINATION AS TO THE MATERIAL'S SUITABILITY AND COMPLETENESS FOR USE IN THEIR PARTICULAR APPLICATIONS.