Ethanol
Material Safety Data Sheet

CITGO Petroleum Corporation
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MSDS No. 03201
Revision Date 3/14/2006

IMPORTANT: Prepared in accordance with 29 CFR 1910.1200. Read this MSDS before handling or disposing of this product and pass this information on to employees, customers and users of this product.

Hazard Rankings

	HMIS	NFPA
Health Hazard	* 1	1
Fire Hazard	3	3
Reactivity	0	0

* = Chronic Health Hazard

Protective Equipment

Minimum Recommended
See Section 8 for Details

Emergency Overview

Physical State Liquid.

Color Clear to light amber **Odor** Hydrocarbon (Strong.)

DANGER! Extremely flammable liquid mixture; vapor may cause flash fire or explosion!
Deliberate Ingestion may be harmful or fatal!
Mist or vapor may irritate the eyes, mucous membranes, and respiratory tract!
Liquid contact may cause minimal to severe eye irritation and/or
mild to severe skin irritation and inflammation!
May be harmful if inhaled or absorbed through the skin!
Overexposures may cause central nervous system (CNS) depression and
target organ effects like blood or blood-forming tissue damage!
Aspiration into the lungs may cause
pulmonary edema and chemical pneumonia!
Prolonged and/or repeated inhalation may increase the heart's susceptibility to arrhythmias (irregular beats)!
Contains low levels of Benzene! Cancer hazard; may cause leukemia
and other blood disorders!
Mutagenic hazard; may cause genetic damage!
Based on component animal testing, may adversely affect reproduction!

SECTION 1. PRODUCT IDENTIFICATION

Trade Name	Ethanol	**Technical Contact**	(800) 525-4692 or (713) 321-4269 (M-F)
Product Number	03201	**Medical Emergency**	(918) 495-4700
CAS Number	Mixture	**CHEMTREC Emergency (United States Only)**	(800) 424-9300
Product Family	Ethanol + natural gasoline		
Synonyms	Denatured Ethanol; Denatured Industrial Ethanol.		

ECTION 2. COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
Ethanol	64-17-5	95 - 99
C4-C12 Hydrocarbons (Natural Gasoline)	8006-61-9	<5

SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin Contact. Eye Contact. Absorption. Inhalation.

Signs and Symptoms of Acute Exposure

Inhalation

Breathing high concentrations of vapor may cause respiratory irritation, euphoria, excitation or giddiness, headache, nausea, vomiting, abdominal pain, loss of appetite, fatigue, muscular weakness, staggering gait, and central nervous system (CNS) depression. CNS effects include dizziness, drowsiness, disorientation, vertigo, memory loss, visual disturbances, difficulty with breathing, convulsions, unconsciousness, paralysis, coma, and even death, depending upon level of exposure concentration and/or duration. Vapors can reduce the oxygen content in air.

Eye Contact

Animal test results and actual human exposures of this material's components suggest that this product can cause minimal to severe eye irritation upon short-term exposure. Symptoms include stinging, watering, redness, and swelling.

Skin Contact

Animal test results and actual human exposures of this material's components suggest that this product can cause minimal to moderate skin irritation. Short-term contact symptoms include redness, itching, and burning of the skin. This material may also be absorbed through the skin and produce CNS depression effects (see "Inhalation" above). If the skin is damaged, absorption increases. Prolonged and/or repeated contact may cause moderate to severe dermatitis. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and severe tissue damage.

Ingestion

If swallowed, this material may irritate the mucous membranes of the mouth, throat, and esophagus. It can be readily absorbed by the stomach and intestinal tract. Symptoms include a burning sensation of the mouth and esophagus, nausea, abdominal pain, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, and delirium, as well as additional central nervous system (CNS) effects (see "Inhalation" above).

Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. Aspiration can result in severe lung damage or death. Progressive CNS depression, respiratory insufficiency, and ventricular fibrillation may also result in death.

Chronic Health Effects Summary

Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

Reports have associated repeated and prolonged occupational overexposure to solvent naphthas with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). And, altered mental state, drowsiness, menstrual problems, peripheral motor neuropathy, irreversible brain damage (so-called "Petrol Sniffers Encephalopathy"), delirium, seizures, and sudden death have been common results for naphtha abusers. Intentional misuse by deliberately concentrating and inhaling the **gasoline** portion of this material may be harmful or fatal.

Benzene is considered to be a cancer causing agent. It damages blood cells, the bone marrow, and other blood-forming tissues causing leukopenia, aplastic anemia, and/or acute myelogenous leukemia (AML). Benzene is also capable of causing changes in genetic material (chromosomes). Chronic overexposures have caused vaginal bleeding, heavy menstral bleeding, and hemorrhagic complications during pregnancy. Available information indicates that benzene is NOT teratogenic, but is fetotoxic at exposure levels which result in mild maternal toxicity. In limited animal tests, high inhaled doses of benzene have caused

decreased fetal body weights, increased skeletal variations, and alterations in the formation and development of blood cells in the bone marrow of rodents. (See Section 11.)

Conditions Aggravated by Exposure

Personnel with pre-existing central nervous system (CNS) disease, neurological conditions, skin disorders, liver or kidney function, blood disorders, or chronic respiratory diseases, and women attempting to conceive should avoid exposure. Special precautions are necessary for pregnant women and nursing mothers.

Exposure to high concentrations of this material may increase the sensitivity of the heart to **epinepherine (adrenalin) and catecholamine-like drugs**Personnel with pre-existing cardiac disorders may be more susceptible to this effect (see Section 4, "Note to Physicians").

Target Organs

This substance is toxic to lungs, central nervous system, brain, mucous membranes, skin, eyes, and possibly, the blood, bone marrow and other blood-forming tissues, heart, liver, kidneys, and reproductive systems.

Carcinogenic Potential

CARCINOGENIC EFFECTS Classified 1 (Proven for human.) by IARC, + (Proven.) by OSHA [Benzene].

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification				OSHA Physical Hazard Classification					
Irritant	X	Sensitizer	X	Combustible		Explosive		Pyrophoric	
Toxic		Highly Toxic		Flammable	X	Oxidizer		Water-reactive	
Corrosive		Carcinogenic	X	Compressed Gas		Organic Peroxide		Unstable	

SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation

Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.

Eye Contact

Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.

Skin Contact

Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.

Ingestion

Do not induce vomiting or give anything by mouth. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

Notes to Physician

INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.

SKIN: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in

ischemia and gangrene. Early symptoms may be minimal.

INGESTION: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

SECTION 5. FIRE FIGHTING MEASURES

NFPA Flammability Classification NFPA Class-IB flammable liquid.

Flash Point Open cup: -5°C (23°F).

Lower Flammable Limit AP 1.3 % **Upper Flammable Limit** AP 19 %

Autoignition Temperature >316°C (>600°F)

Hazardous Combustion Products Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, and possibly other harmful gases/vapors.

Special Properties Extremely Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. May create vapor/air explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

Extinguishing Media SMALL FIRE: Use dry chemicals, carbon dioxide (CO_2), foam, water fog, or inert gas (nitrogen). LARGE FIRE: Use foam, water fog, or waterspray. Water fog and spray are effective in cooling containers and adjacent structures but might cause frothing and/or may not achieve extinguishment. A water jet may be used to cool the vessel's external walls to prevent pressure build-up, autoignition, or explosion. NEVER use a water jet directly on the fire because it may spread the fire to a larger area.

Protection of Fire Fighters Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from venting safety devices or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid(s) enter sewers/waterways.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Extremely Flammable Liquid! Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. A vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent its entry into waterways, sewers, basements, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.

For large spills, secure the area and control access. Dike far ahead of a liquid spill to ensure

complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbant pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all laws and regulations.

SECTION 7. HANDLING AND STORAGE

Handling

A spill or leak can cause an immediate fire/explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Bond and ground all equipment before transferring this material from one container to another. Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation/personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food, chewing, or smoking materials. Do not take internally.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure limits. Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.

Storage

Store and transport in accordance with all applicable laws. Keep containers tightly closed and store in a cool, dry, well-ventilated place, plainly labeled, and out of closed vehicles. Keep away from all ignition sources! Ground all equipment containing this material. Containers should be able to withstand pressures expected from warming and cooling in storage. This flammable liquid should be stored in a separate safety cabinet or room, and preferably refrigerated. All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable requirements of the N.F.P.A.'s National Electical Code (NEC).

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electric Code. An emergency eye wash station and safety shower should be located near the work-station.

Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Eye Protection	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.
Hand Protection	Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
Body Protection	Avoid skin contact. It is recommended that fire-retardant garments (e.g. Nomex™) be worn while working with flammable and combustible liquids. If splashing or spraying is expected, chemical-resistant protective clothing (Tyvek®, nitrile, or neoprene) should be worn. This might include long-sleeves, apron, slicker suit, boots, and additional facial protection. If general contact occurs, IMMEDIATELY remove soaked clothing and take a shower. Contaminated leather goods should be removed promptly and discarded.
Respiratory Protection	For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For airborne vapor concentrations that exceed the recommended protection factors for organic vapor respirators, use a full-face, positive-pressure, supplied air respirator. Due to fire and explosion hazards, do not enter atmospheres containing concentrations greater than 10% of the lower flammable limit of this product.
General Comments	Warning! Odor is an inadequate warning for hazardous conditions, especially since the odor threshold of **benzene** is several ppm above the occupational exposure guideline levels. Released vapors may cause extremely flammable, explosive, and/or oxygen-deficient atmospheres. Do not enter such areas or confined spaces without taking special safety precautions including monitoring for oxygen deficiency and flammability.

Occupational Exposure Guidelines

Substance	Applicable Workplace Exposure Levels
Ethanol	**ACGIH (United States).** TWA: 1000 ppm 8 hour(s). **OSHA (United States).** TWA: 1000 ppm 8 hour(s).
Benzene	**ACGIH (United States). Skin** TWA: 0.5 ppm 8 hour(s). STEL: 2.5 ppm 15 minute(s). **OSHA (United States). Skin Notes: See Table Z-2 for exclusions in 20 CFR 1910.1028 to the PEL.** TWA: 1 ppm 8 hour(s). STEL: 5 ppm 15 minute(s).
Petroleum Hydrocarbons	**ACGIH (United States, 2000).** TWA: 300 ppm STEL: 500 ppm **OSHA (United States, 1989).** TWA: 300 ppm STEL: 500 ppm

ECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

Physical State	Liquid.	**Color**	Clear to light amber	**Odor**	Hydrocarbon (Strong.)
Specific Gravity	AP 0.8	**pH**	6.0 to 7.0	**Vapor Density**	1.6 (Air = 1)
Boiling Range	78.5°C (173.3°F)			**Melting/Freezing Point**	-160° to 13°C (-255° to 55°F)
Vapor Pressure	Not available.			**Volatility**	785 g/l VOC (w/v)
Solubility in Water	Partially soluble in water			**Viscosity (cSt @ 40°C)**	0.1 to 0.5
Flash Point	Open cup: -5°C (23°F).				
Additional Properties	No additional information.				

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability Stable. **Hazardous Polymerization** Not expected to occur.

Conditions to Avoid Keep away from heat, sparks, and other ignition sources, strong oxidizing conditions, and freezing temperatures.

Materials Compatibility Strong acids, especially nitric acid, alkalies, and oxidizers such as liquid chlorine, many flourides, perchlorates, and other halogens, hydrogen peroxide, and oxygen.

Hazardous Decomposition Products No substances are readily identified from composition; but, no degradation data is available.

SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

Toxicity Data

Ethanol:
Inhalation exposure to ethanol vapor at concentrations above applicable workplace exposure levels is expected to produce eye and mucus membrane irritation. Human exposure at concentrations from 1000 to 5000 ppm produced symptoms of narcosis, stupor and unconsciousness. Subjects exposed to ethanol vapor in concentrations between 500 and 10,000 ppm experienced coughing and smarting of the eyes and nose. At 15,000 ppm there was continuous lacrimation and coughing. While extensive acute and chronic effects can be expected with ethanol consumption, ingestion is not expected to be a significant route of exposure to this product.

Benzene:

ORAL (LD50):	Acute: 930 mg/kg [Rat]. 4700 mg/kg [Mouse].
INHALATION (LC50): (VAPOR):	Acute: 10000 ppm 7 hour(s) [Rat]. 9980 ppm 8 hour(s) [Mouse].

Studies of Workers Over-Exposed to Benzene:
Studies of workers exposed to benzene show clear evidence that over-exposure can cause cancer of the blood forming organs (acute myelogenous leukemia) and aplastic anemia, an often fatal disease. Studies also suggest over-exposure to benzene may be associated with other types of leukemia and other blood disorders. Some studies of workers exposed to benzene have shown an association with increased rates of chromosome aberrations in circulating lymphocytes. One study of women workers exposed to benzene suggested a

weak association with irregular menstruation. However, other studies of workers exposed to benzene have not demonstrated clear evidence of an effect on fertility or reproductive outcome in humans. Benzene can cross the placenta and affect the developing fetus. Cases of aplastic anemia have been reported in the offspring of persons severely over-exposed to benzene.

Studies in Laboratory Animals:
Studies in laboratory animals indicate that prolonged, repeated exposure to high levels of benzene vapor can cause bone marrow suppression and cancer in multiple organ systems. Studies in laboratory animals show evidence of adverse effects on male reproductive organs following high levels of exposure but no significant effects on reproduction have been observed. Embryotoxicity has been reported in studies of laboratory animals but effects were limited to reduced fetal weight and skeletal variations.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity No data.

Environmental Fate

For additional ecological information concerning components of this product, users should refer to the Hazardous Substances Data Bank® and the Oil and Hazardous Materials/Technical Assistance Data System (OHM/TADS) maintained by the U.S. National Library of Medicine. (See Section 2 for components.)

SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. If spilled material is introduced into a wastewater treatment system, chemical and biological oxygen demand (COD and BOD) will likely increase. This material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. In sewage- seeded wastewater, at or below concentrations of 0.2 vol.% of this naphtha, there is little or no effect on bio-oxidation and/or digestion. However, at 1 vol.%, it doubles the required digestion period. Higher concentrations interfere with floc formation and sludge settling and also plug filters or exchange beds. Vapor emissions from a bio-oxidation process contaminated by this material might prove to be a health hazard.

Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). State and/or local regulations might be even more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9346 or your regional US EPA office for guidance concerning case specific disposal issues.

SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

US DOT Status A U.S. Department of Transportation (DOT) regulated material.

Proper Shipping Name Alcohol, n.o.s. (Ethanol, Gasoline)

Hazard Class	3	**Packing Group(s)**	II
		UN/NA Number	UN1987

Reportable Quantity A Reportable Quantity (RQ) has not been established for this material.

Placard(s)

Emergency Response Guide No.	128
MARPOL III Status	Not a DOT "Marine Pollutant" per 49 CFR 171.8.

SECTION 15. REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 Emergency Planning and Notification The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 311/312 Hazard Identification The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

Fire Hazard, Acute (Immediate) Health Hazard, and Chronic (Delayed) Health Hazard.

SARA 313 Toxic Chemical Notification and Release Reporting This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA:
Benzene [CAS No.: 71-43-2] Concentration: 0.1%

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:
Benzene [CAS No.: 71-43-2] RQ = 10 lbs. (4.536 kg) Concentration: 0.11%

Clean Water Act (CWA) This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

California Proposition 65 This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):
Ethanol: 97%
Benzene: 0.11%

New Jersey Right-to-Know Label

Additional Remarks No additional regulatory remarks.

ECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION

Version Number	2.0
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ABBREVIATIONS

AP: Approximately EQ: Equal >: Greater Than <: Less Than NA: Not Applicable ND: No Data NE: Not Establishe

ACGIH: American Conference of Governmental Industrial Hygienist

AIHA: American Industrial Hygiene Associatior

IARC: International Agency for Research on Cancer

NTP: National Toxicology Program

NIOSH: National Institute of Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

NPCA: National Paint and Coating Manufacturers Association

HMIS: Hazardous Materials Information System

NFPA: National Fire Protection Association

EPA: US Environmental Protection Agency

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