



MATERIAL SAFETY DATA SHEET

GASOLINE WITH ETHANOL

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: GASOLINE WITH ETHANOL

SYNONYMS: UNLEADED REGULAR GASOLINE, UNLEADED PLUS GASOLINE, UNLEADED SUPER GASOLINE

SUPPLIER: GULF OIL LIMITED PARTNERSHIP
100 CROSSING BOULEVARD
FRAMINGHAM, MASSACHUSETTS 01702-5401

Emergency:
CHEMTREC: 800-424-9300

MSDS Internet Website: WWW.GULFOIL.COM

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: HYDROCARBONS AND ADDITIVES

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

Substance Name	Wt%
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GASOLINE (8006-61-9)	85-95
ETHANOL (64-17-5)	5-15

COMPONENT(S) OF PRODUCT INGREDIENTS INCLUDE:

BENZENE (71-43-2) < 5

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EFFECTS OF OVEREXPOSURE: Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Respiratory irritation, dizziness, nausea, loss of consciousness. Prolonged exposure to high concentrations of gasoline has caused kidney damage and kidney cancer in rats and liver cancer in mice. See MSDS toxicology section for additional data.

EMERGENCY RESPONSE DATA: Yellow to Orange Liquid. Extremely flammable. Vapor accumulation could flash and/or explode if in contact with open flame. DOT ERG No. : 128

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

INHALATION: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance and call a physician. If breathing has stopped, use mouth to mouth resuscitation.

INGESTION: Do not induce vomiting. Give 1 to 2 glasses of water. Get medical assistance.

NOTE TO PHYSICIANS: Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: CO₂, foam, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective fighting fires with low flash points. However, water spray may be used to cool and protect exposed materials. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable. Vapor accumulation could flash and/or explode if in contact with open flame. Flash Point C(F): -40(-40) (ASTM D-56). Flammable limits - LEL: 1.1%, UEL: 7.6%.

NFPA HAZARD ID: Health: 1, Flammability: 3, Reactivity: 0

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Possibly hydrocarbon fragments. Flammable vapors.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U. S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Remove leaking containers to detached area. Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal. Runoff may create fire or explosion hazard in sewer system.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: Avoid inhalation of vapors or mists. Avoid contact with skin. Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment. The U. S. Occupational Safety and Health Administration (OSHA), finalized an updated regulation on benzene on September 11, 1987. This standard exempts the storage, transportation, distribution, dispensing, sale or use of gasoline, motor fuels, or other fuels containing benzene, subsequent to the final discharge from bulk wholesale storage facilities. Certain indoor motor fuel dispensing operations are covered regardless of the exemption. The standard establishes requirements covering potential employee exposures, container labeling, medical programs, and employee training. Refer to Chapter 29 of the Code of Federal Regulations (CFR) part 1910.1028 for specific guidance. The OSHA mandated label of "Danger. Contains Benzene. Cancer Hazard. " is required only at affected operations.

STORAGE: Store away from all ignition sources in a cool area equipped with an automatic sprinkling system. Outside or detached storage preferred. Storage containers should be grounded and bonded.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use away from all ignition sources. Ventilation required and equipment must be explosion proof.

RESPIRATORY PROTECTION: Approved respiratory protective equipment must be used when vapor or mists concentrations exceed applicable standards.

EYE PROTECTION: If splash with liquid is possible, chemical type goggles should be worn.

SKIN PROTECTION: If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.

Substance Name (CAS-No.)	Source	---TWA---		----STEL---		NOTE
		ppm	mg/m3	ppm	mg/m3	
GASOLINE (8006-61-9)	OSHA	300	900	500	1500	
	ACGIH	300	890	500	1480	
	XOM	100	300			
ETHANOL (64-17-5)	OSHA	1000	1900			
	ACGIH	1000	1880			
BENZENE (71-43-2)	OSHA	1		5		
	ACGIH	0.5	1.6	2.5	8	

NOTE: Limits shown for guidance only. Follow applicable regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid
 COLOR: Yellow to Orange
 ODOR: Hydrocarbon
 ODOR THRESHOLD-ppm: NE
 pH: NA
 BOILING POINT C(F): 38(100)
 MELTING POINT C(F): NA
 FLASH POINT C(F): -40(-40) (ASTM D-56)
 FLAMMABILITY: NE
 AUTO FLAMMABILITY C(F): NE
 EXPLOSIVE PROPERTIES: NA
 OXIDIZING PROPERTIES: NA
 VAPOR PRESSURE-mmHg 20 C: > 400.0
 VAPOR DENSITY: 3.0
 EVAPORATION RATE: NE
 RELATIVE DENSITY, 15/4 C: 0.7-0.76
 SOLUBILITY IN WATER: Slight
 PARTITION COEFFICIENT: NE
 VISCOSITY AT 40 C, cSt: < 1.0
 VISCOSITY AT 100 C, cSt: NA
 POUR POINT C(F): NA
 FREEZING POINT C(F): NE
 VOLATILE ORGANIC COMPOUND: NE

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.

CONDITIONS TO AVOID: Heat, sparks, flame and build up of static electricity.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Possibly hydrocarbon fragments. Flammable vapors.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

INHALATION TOXICITY (RATS): Harmful (LC50: greater than 2 but 5 mg/l or less). ---Based on testing of similar products and/or the components.

EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.

SKIN IRRITATION (RABBITS): Irritant. (Primary Irritation Index: 3 or greater but less than 5). ---Based on testing of similar products and/or the components.

OTHER ACUTE TOXICITY DATA: Inhalation of vapors/mists may cause respiratory system irritation.

---CHRONIC TOXICOLOGY (SUMMARY)---

Recent studies with laboratory animals have shown that gasoline vapors administered in high concentrations over a prolonged period of time (two year life time studies) caused kidney damage and kidney cancer in male rats and liver cancer in female mice. These effects were not seen in female rats or male mice. Generally, human exposures to gasoline vapors are considerably less than those used in the animal toxicity studies. As far as scientists know, low level or infrequent exposure to gasoline vapors is unlikely to be associated with cancer or other serious diseases in humans. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.

---OTHER TOXICOLOGY DATA---

Gasoline consists of a complex blend of petroleum/processing derived paraffinic, olefinic, naphthenic and aromatic hydrocarbons which may contain up to 5 percent benzene, with 1-2 percent being typical in the United States; and low levels of multifunctional additives. Repeated exposure to low levels of benzene (<100 ppm) has been reported to result in blood abnormalities in both animals and humans, including anemia and, in rare cases, leukemia. These

effects were not observed in laboratory animals following repeated exposure to vapors from unleaded gasoline containing 2 percent benzene.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:

ECOTOXICITY: Not established.

MOBILITY: Not established.

PERSISTENCE AND DEGRADABILITY: Not established.

BIOACCUMULATIVE POTENTIAL: Not established.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity, or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP).

BENZENE: 4.9999 PCT (TCLP)

FLASH: -40(-40) C(F)

14. TRANSPORT INFORMATION

USA DOT:

SHIPPING NAME:	Gasoline
HAZARD CLASS & DIV:	3
ID NUMBER:	UN1203
ERG NUMBER:	128
PACKING GROUP:	PG II
STCC:	4908178
DANGEROUS WHEN WET:	No
POISON:	No
LABEL(s):	Flammable Liquid
PLACARD(s):	Flammable

PRODUCT RQ: NA
MARPOL III STATUS: NA

IMO:
HAZARD CLASS & DIV: 3
UN NUMBER: 1203
PACKING GROUP: PG II
SHIPPING NAME: Gasoline
LABEL(s): Flammable Liquid
MARPOL III STATUS: NA

ICAO/IATA:
HAZARD CLASS & DIV: 3
ID/UN Number: 1203
PACKING GROUP: PG II
SHIPPING NAME: Gasoline
SUBSIDIARY RISK: NA
LABEL(s): Flammable Liquid

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with TSCA, and EINECS/ELINCS.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:
FIRE CHRONIC ACUTE

This product contains the following SARA (313) Toxic Release Chemicals:

CHEMICAL NAME	CAS NUMBER	CONC.
BENZENE(COMPONENT ANALYSIS)	71-43-2	<5%

The following product ingredients are cited on the lists below:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
ETHYL ALCOHOL	64-17-5	1, 6, 10, 18, 19, 20, 21, 23, 25, 26
BENZENE (COMPONENT ANALYSIS) (<5.00%)	71-43-2	1, 2, 4, 6, 9, 10, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26
GASOLINE	8006-61-9	1, 8, 10, 18, 19, 20, 21, 23, 26

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL 6=IARC 1 11=TSCA 4 16=CA P65 CARC 21=LA RTK

2=ACGIH A1	7=IARC 2A	12=TSCA 5a2	17=CA P65 REPRO	22=MI 293
3=ACGIH A2	8=IARC 2B	13=TSCA 5e	18=CA RTK	23=MN RTK
4=NTP CARC	9=OSHA CARC	14=TSCA 6	19=FL RTK	24=NJ RTK
5=NTP SUS	10=OSHA Z	15=TSCA 12b	20=IL RTK	25=PA RTK
				26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

16. OTHER INFORMATION

Precautionary Label Text:

CONTAINS GASOLINE

DANGER!

EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. MAY CAUSE SKIN, NOSE, THROAT, AND LUNG IRRITATION, DIZZINESS, NAUSEA, AND LOSS OF CONSCIOUSNESS. LOW VISCOSITY MATERIAL-IF SWALLOWED, MAY BE ASPIRATED AND CAN CAUSE SERIOUS OR FATAL LUNG DAMAGE.

LONG-TERM EXPOSURE TO GASOLINE VAPOR HAS CAUSED KIDNEY AND LIVER CANCER IN LABORATORY ANIMALS.

Keep away from heat, sparks, and flame. Avoid all personal contact. Avoid prolonged breathing of vapor. Use with adequate ventilation. Keep container closed. Approved portable containers must be properly grounded when transferring fuel. For use as a motor fuel only. Misuse of gasoline may cause serious injury or illness. Never siphon by mouth. Not to be used as a solvent or skin cleaning agent.

FIRST AID: In case of contact, wash skin with soap and water. Remove contaminated clothing. Destroy or wash clothing before reuse. If swallowed, seek immediate medical attention. Do not induce vomiting. Only induce vomiting at the instruction of a physician.

Empty container may contain product residue, including flammable or explosive vapors. Do not cut, puncture, or weld on or near container. All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm are created by the combustion of this product. Refer to product Material Safety Data Bulletin for further safety and health information.

USE: FUEL

NOTE: PRODUCTS OF GULF OIL LIMITED PARTNERSHIP IS NOT FORMULATED TO CONTAIN PCBS.

INGREDIENT DESCRIPTION	PERCENT	CAS NUMBER
GASOLINE	85-95	8006-61-9
ETHYL ALCOHOL	5-15	64-17-5

Approval Date: MAY 2007 Revised: May 2009

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