

Section 1 - Chemical Product and Company Identification

Product Name: Unleaded Mid-Grade Gasoline with 10% Ethanol
Chemical Name: Unleaded Gasoline / Gasohol
Chemical Family: Petroleum Hydrocarbon
Chemical Formula: Mixture
CAS Number: 8006-61-9
Other Designations: Petrol, Unleaded Gasoline, UNL MID-GRADE 10% ETOH
Manufacturer: Ergon -- West Virginia, Inc., P.O. Box 356, Newell, WV 26050
Company Contact: Will Poe, Phone (601) 630-8319 (Vicksburg, MS)

EMERGENCY TELEPHONE NUMBERS:

Ergon -- West Virginia, Inc. (601) 630-8319 (Vicksburg, MS) Normal Business Hours
 Chemtrec (800) 424-9300 After Business Hours

Section 2 - Composition / Information on Ingredients

This product may be regulated, have exposure limits or other information identified as the following: Unleaded Gasoline (wholly vaporized). This product is considered a hazardous product under 29 CFR 1910.1200 (Hazard Communication).

Ingredient Name	CAS Number	% vol
Unleaded Mid-Grade Gasoline Mixture	8006-61-9	95-100
Ethyl Alcohol	64-17-5	5-10
Benzene	71-43-2	1-5
Xylene	1330-20-7	1
Toluene	108-88-3	0.9
Ethyl benzene	100-41-4	0.45
Hexane	110-54-3	< 2
Naphthalene	91-20-3	0.3
Trimethyl benzene	25551-13-7	< 4

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Gasoline	300 ppm 900 mg/ m3	500 ppm 1500 mg/ m3	300 ppm 890 mg/ m3	500 ppm 1480 mg/ m3	300 ppm 900 mg/ m3	500 ppm 1500 mg/ m3	N.D.
Benzene	1 ppm 25 ppm Ceiling	5 ppm	0.5 ppm 32 mg/ m3	2.5 ppm	Ca 0.1 ppm	1 ppm	Ca (500ppm)
Ethyl Alcohol	1000 ppm 1900 mg/ m3	none	1000 ppm	none	1000 ppm.	none	3300 ppm
Xylene	100 ppm	150 ppm	100 ppm 435 mg/ m3	150 ppm 655 mg/ m3	100 ppm 435 mg/ m3	150 ppm 655 mg/ m3	900 ppm
Toluene	100 ppm 375 mg/ m3	150 ppm 560 mg/ m3	50 ppm	none	100 ppm 375 mg/ m3	150 ppm 560 mg/ m3	500 ppm
Naphthalene	10 ppm 50 mg/ m3	125 ppm 545 mg/ m3	100 ppm	125 ppm	10 ppm 50 mg/ m3	15 ppm 50 mg/ m3	200 ppm
Ethyl benzene	100 ppm 435 mg/ m3	125 ppm 545 mg/ m3	100 ppm	125 ppm	100 ppm 435 mg/ m3	125 ppm 545 mg/ m3	800 ppm (10%LEL)
Hexane	500 ppm	none	50 ppm	1000 ppm	50 ppm 180 mg/ m3	none	1100 ppm
Trimethyl benzene	25 ppm	none	25 ppm	none	25 ppm	none	N.D.

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

DANGER! EXTREMELY FLAMMABLE AND VOLATILE. KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. ASPIRATION (INADVERTENT SUCTION) INTO LUNGS CAN PRODUCE CHEMICAL PNEUMONIA OR EVEN DEATH. CONTAINS BENZENE WHICH MAY CAUSE CANCER OR BE TOXIC TO BLOOD-FORMING ORGANS. CONTAINS MATERIAL THAT HAS CAUSED CANCER BASED ON ANIMAL DATA. NEVER SIPHON BY MOUTH.

Material will readily ignite at normal temperatures. Flammable liquid - may release vapors that form flammable mixtures at or above the flash point. Excessive inhalation of this material may cause headache, dizziness and incoordination. Water may be an ineffective extinguishing medium. Foam (preferred), dry chemical, water. Wear full set of protective equipment including chemical goggles and gloves.

Gasoline is either a clear or colored liquid with a strong hydrocarbon odor. Gasoline is a volatile and extremely flammable liquid and may cause flash fires. Keep away from heat, sparks or flame. Gasoline can also contain significant concentrations of benzene, which has been shown to cause cancer or be toxic to blood-forming organs. Never siphon this product by mouth. If swallowed, gasoline may get sucked into the lungs (aspirated) and cause lung damage or even death.

CONSUMER WARNING LABEL:

GASOLINE HEALTH & SAFETY WARNING

- EXTREMELY FLAMMABLE, VAPORS MAY EXPLODE
- HARMFUL OR FATAL IF SWALLOWED
- LONG TERM EXPOSURE TO VAPORS HAS CAUSED CANCER IN LABORATORY ANIMALS
- KEEP FACE AWAY FROM NOZZLE WHILE FILLING
- KEEP NOZZLE AWAY FROM EYES AND SKIN
- NEVER SIPHON BY MOUTH
- DON'T OVERFILL TANK

FOR USE AS A MOTOR FUEL ONLY

WARNING: STATIC ELECTRICITY, SPARK EXPLOSION, ELECTRONIC DEVICES

Do not get back in your vehicle while refueling. Re-entry could cause static electricity build-up. Use approved container. Put container on ground, never on or in vehicle.. Keep nozzle in contact with container. Keep cellular phones or other devices in your vehicle during refueling.

Table with 2 columns: Hazard Category and Rating. H 1, F 3, R 0, PPE†, †Sec. 8

Potential Health Effects/Primary Entry Routes

Inhalation: Exposure to vapor concentrations exceeding 1,000 ppm can cause respiratory irritation, headache, dizziness, nausea and loss of coordination. Higher concentrations may cause loss of consciousness, cardiac sensitization, coma and death resulting from respiratory failure.

Eye: Eye irritation may result from contact with the liquid or exposure to vapor concentrations above the TLV.

Skin: Prolonged or repeated liquid contact can defat or dry the skin and lead to irritation and/or dermatitis.

Ingestion: Ingestion may result in nausea, vomiting, diarrhea and restlessness. Aspiration (inadvertent suction) of liquid into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonitis, pulmonary edema/hemorrhage and even death.

Carcinogenicity: The International Agency for Research on Cancer (IARC) has determined that there is inadequate evidence for the carcinogenicity of gasoline in humans. IARC determined that limited evidence of carcinogenicity in animals exists. IARCIS overall evaluation of gasoline, in spite of limited carcinogenicity evidence, has resulted in the IARC designation of gasoline as possibly carcinogenic to humans (Group 2B) because gasoline contains benzene.

Medical Conditions Aggravated by Long-term Exposure (Chronic Effects) : Pre-existing eye, skin, respiratory, liver and/or kidney disorders may be aggravated by exposure to gasoline.

Section 4 - First Aid Measures

Inhalation: Remove affected person to fresh air; administer oxygen or artificial respiration if breathing is impaired. Call a physician.

Eye Contact: In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes. And seek medical advice.

Skin Contact: Remove contaminated clothing. Wash affected area with mild soap and water. Launder contaminated clothing before reuse. Get medical attention if skin disorder develops.

Ingestion: If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting or give liquids.

Notes to Physician: Pulmonary aspiration hazard if swallowed; treat symptomatically.

Section 5 - Fire-Fighting Measures

Flash Point: - 45 °F

Flash Point Method: not available

Burning Rate: not available

Autoignition Temperature: > 500 °F

Lower Flammable Limit (LFL): 1.4

Upper Flammable Limit (UFL): 7.6

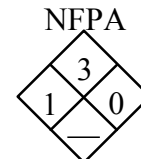
Flammability Classification: flammable liquid

Extinguishing Media: Foam AFFF/ATC (preferred) dry chemical, water. Water may be an ineffective extinguishing medium. Use water to cool fire-exposed containers and to protect personnel.

General Fire Hazards: Extremely flammable liquid; material can ignite readily at normal temperatures. Vapors may form flammable mixtures. Empty containers may retain product residue including flammable or explosive vapors. Do not cut, drill, grind, or weld near full, partially full, or empty product containers. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Static charge may accumulate and spark or ignite. Toxic fumes, gases or vapors may evolve on burning.

Hazardous Combustion Products: carbon monoxide and carbon dioxide.

Fire-Fighting Equipment/Instructions: Wear full set of protective equipment including chemical goggles and gloves. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires. For small fires, Class B fire extinguishing media such as CO₂, dry chemical, foam, or water spray can be used. For large fires water spray, fog, or foam can be used. Fire fighting should be attempted only by those adequately trained.



Section 6 - Accidental Release Measures

Containment Procedures: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Clean-Up Procedures: Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Wear appropriate protective equipment and clothing during clean-up. Thoroughly wash the area after a spill or leak clean-up. Do not allow the spilled product to enter public drainage system or open water courses.

Evacuation Procedures: Evacuate the area promptly. Keep upwind of the spilled material and isolate exposure.

Special Instructions: Remove soiled clothing and laundry before reuse. Avoid skin contact and inhalation of vapors during disposal of spills.

Spill to land or water: Treat as an oil spill. Report spills to appropriate authorities.

Section 7 - Handling and Storage

Procedures for Handling: Do not breathe gas/fumes/vapor/spray. Use this product with adequate ventilation. Ground equipment. Do not get this material in your eyes, on your skin, or on your clothing. Keep this product from heat, sparks, or open flame. Wash thoroughly after handling. Do not reuse the empty container. Wash thoroughly after handling. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or promptly disposed.

Warning: Contains benzene. Cancer hazard. Can cause kidney, liver, and blood disorders. Do not siphon by mouth.

Recommended Storage Methods: Keep the container tightly closed and in a cool, well-ventilated place. Do not store this material in open or unlabeled containers. Eliminate all sources of ignition, including electronic devices and cell phones. Store away from strong oxidizers. This material can accumulate static charge which may cause spark and become an ignition source.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines:

A. General Product Information - Follow the recommended exposure limits.

B. Component Exposure Limits

Gasoline (CAS # 8006-61-9)

ACGIH: TLV: 300 ppm; 890 mg/m³; STEL: 500 ppm; 1480 mg/m³

OSHA: PEL: 300 ppm; 900 mg/m³; STEL: 500 ppm; 1500 mg/m³

Benzene (CAS # 71-43-2)

ACGIH: TLV: 10 ppm; 32 mg/m³; STEL: 500 ppm; 1480 mg/m³

OSHA: PEL: 1 ppm (unless specified in 1910.1028)

STEL: 5 ppm (10 min) (unless specified in 1910.1028)

Ceiling: 25 ppm (unless specified in 1910.1028)

NIOSH: STEL: 1 ppm

Engineering Controls: Use local exhaust ventilation. Explosion-proof exhaust devices are required.

Eye / Face Protection: Wear safety glasses; chemical goggles (if splashing is possible).

Skin Protection: Use impervious gloves for prolonged contact. The use of neoprene, viton, PVA, or nitrile rubber gloves is recommended.

Respiratory Protection: For high concentration of vapors or mists use NIOSH/MSHA approved vapor/mist cartridge respirator. Respirator protection factor criteria is cited in ANSI Z88.2.

General: Use good industrial hygiene practices.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Color: Colorless, clear, orange, or reddish golden brown

Odor: Petroleum

Odor Threshold: not available

Vapor Pressure: 360-700 mm Hg @100°F

Vapor Density (Air=1): 3 - 4

Specific Gravity (H₂O=1): <0.8

Water Solubility: insoluble

Boiling Point: IBP=85°F, EP=435°F

Melting Point: not available

% Volatile: 100

Evaporation Rate: <1 (butyl acetate = 1)

pH: not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable at 70°F, 760 mm Hg

Hazardous Polymerization: Hazard polymerization will not occur.

Chemical Incompatibilities: This product may react with strong oxidizing agents.

Conditions to Avoid (Stability): Avoid excessive heat and all sources of ignition, and strong oxidizers

Hazardous Decomposition Products: Smoke, carbon dioxide and carbon monoxide.

Section 11- Toxicological Information

Acute Toxicity / Target Organ Information:

A. General Product / Component Information

Benzene can cause blood and blood-producing system disorders. Aspiration of material into the lungs can cause bronchopneumonia or pulmonary edema. Product can affect the central nervous system, kidney, liver and blood-forming system.

B. Component LD50 / LC50

Benzene (CAS # 71-43-2)

Inhalation, rat: LC50 = 10,000 ppm 7 hr oral, rat: LD50 = 3306 mg/kg

Skin, mouse: LD50 = 48 mg/kg

Epidemiology: Studies have shown that prolonged exposure to the benzene component can cause leukemia and other serious blood disorders and complications to the blood-producing system.

Carcinogenicity:

A. General Product / Component Information - IARC has found gasoline to be a possible human carcinogen.

B. Component Carcinogenicity Listings

Gasoline (CAS # 8006-61-9)

OSHA: Possible Select Carcinogen

IARC: Group 2B - Possibly carcinogenic to humans.

Benzene (CAS # 71-43-2)

ACGIH: (A2) - suspected human carcinogen

OSHA: Select Carcinogen

NIOSH: Y

NTP: Known Carcinogen

IARC: Group 1 - Carcinogenic to humans.

Teratogenicity / Reproductive Effects: Animal studies have shown that repeated exposure to benzene can damage the embryo or fetus.

Neurotoxicity: Excessive exposure can cause dizziness and central nervous system depression.

Mutagenicity: No data available on this product as a whole.

Other Information: No information available.

Section 12 - Ecological Information

Effects: Product may be harmful to aquatic life in low concentrations,

Ecotoxicity: Keep product out of sewers and waterways.

Freshwater fish toxicity: LD50 is 8 ppm at 96 hrs.

Saltwater fish toxicity: LC50 is 2ppm at 96 hrs.

Environmental Fate: No information is available.

Section 13 - Disposal Considerations

U.S. EPA Waste Number & Descriptions:

A. General Product Information - User must test waste using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous wastes. As shipped, this product is considered a D001 ignitable waste.

B. Component Waste Numbers - Benzene (CAS # 71-43-2) is listed as a U019 (Ignitable waste, Toxic waste) and D018 hazardous waste.

Disposal Instructions:

Do not allow this material to drain into sewers / water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulation.

Section 14 - Transport Information

Proper Shipping Name: Gasoline

Hazard Class: 3.1

DOT ID No.: UN1203

Packing Group: II

DOT Shipping Label: Flammable Liquid

Additional Shipping Information:

Packaging containing more than 10 pounds of benzene must be designated "RQ" in the proper shipping name.

International Transportation Regulations:

No additional information.

Section 15 - Regulatory Information

U.S. Federal Regulatory Information:

- A. General Product Information - All components of this product are listed on the U.S. EPA TSCA Inventory.
- B. Component Information - This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4):
 Benzene (CAS # 71-43-2, 1 - 5%); Xylene, Toluene, Ethylbenzene, Naphthalene, Trimethylbenzene
 SARA 313: form R reporting required for 0.1% de minimus concentration
 CERCLA: final RQ = 10 pounds (4.54 kg)

State Regulations:

- A. General Product Information - Unleaded gasoline requires labeling under California Proposition 65.
- B. Component Information - The following components appear on one or more of the following state hazardous substance lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Gasoline	8006-61-9	Y	Y	Y	Y	Y	N
Benzene	71-43-2	Y	Y	Y	Y	Y	Y

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Other Regulations:

- A. General Product Information - All known (non-proprietary) components of this product are listed on the EINECS inventory of existing chemicals.
- B. Component Information

CANADA

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	%	Minimum Concentration
Gasoline	8006-61-9	95 - 100	1% item 793 (802)
Benzene	71-43-2	1 - 5	0.1% item 153 (277)

Section 16 - Other Information

Key / Legend

N = no; Y = yes; ppm - parts per million; mg/m3 = milligrams per cubic meter of air; ACGIH = American Conference of Governmental Industrial Hygienists; Ca = Potential Carcinogen, ETOH = Ethanol, HMIS = Hazardous Material Identification System; IDLH = Immediately Dangerous to Life or Health, NFPA = National Fire Protection Association; N.D. = Not Determined, OSHA = Occupational Safety and Health Administration; TLV = Threshold Limit Value; NIOSH = National Institute of Occupational Safety and Health; NTP = National Toxicology Program; IARC = International Agency for Research on Cancer.

Prepared By: Will Poe **Phone:** (601) 630-8319

Supersedes MSDS Dated: New

Disclaimer: Ergon -- West Virginia, Inc. believes this information is accurate but not all-inclusive in all circumstances. It is the responsibility of the user to determine suitability of the material for their purposes. No warranty, expressed or implied, is given.