

**Section 1 - Chemical Product and Company Identification**

**Product /Chemical Name:** PREMIUM UNLEADED GASOLINE  
**Chemical Family:** Petroleum Hydrocarbon  
**Chemical Formula:** Mixture  
**CAS Number:** 86290-81-5  
**Other Designations:** Saturated Hydrocarbons, Aromatic Hydrocarbons  
**General Use:** Gasoline  
**Manufacturer:** Ergon Refining, Inc., P. O. Box 309, Vicksburg, MS. 39181-0309  
**Company Contact:** Will Poe, Phone (601) 630-8319, FAX (601) 630-8425

**EMERGENCY TELEPHONE NUMBERS:**

Ergon Refining, Inc. Phone (601) 638-4960 Normal Business Hours  
 Chemtrec (800) 424-9300 After Business Hours

**Section 2 - Composition / Information on Ingredients**

Complex mixture of paraffins, cycloparaffins, olefins and aromatic hydrocarbons having hydrocarbon chain lengths predominantly in the range of C4 through C12. Components may be present from trace amounts up to the ranges shown. Contains small amounts of dye and other additives not considered hazardous at the concentrations used.

Ingredient Name	CAS Number	% Range
Petroleum Hydrocarbon	86290-81-5	
Saturated Hydrocarbons (Paraffins and Cycloparaffins)	Mixture	55.0 - 80.0
Aromatic Hydrocarbons (including Benzene, Toluene, Xylenes, Ethylbenzene and Trimethyl Benzenes)	Mixture	20.0 - 40.0
Xylene	1330-20-7	5.0 - 15.0
Toluene	108-88-3	3.0 - 15.0
1,2,4-Trimethylbenzene	95-63-6	2.0 - 5.0
Unsaturated Hydrocarbons (olefins)	Mixture	1.0 - 15.0
Ethyl Benzene	100-41-4	1.0 - 3.0
Benzene	71-43-2	0.5 - 3.5

**Trace Impurities:**

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Saturated Hydrocarbons	None estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Aromatic Hydrocarbons	None estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Xylene	100.00 ppm	150.00 ppm	100.00 ppm	150.00 ppm	none estab.	none estab.	none estab.
Toluene	100.00 ppm	150.00 ppm	50.00 ppm	none estab.	none estab.	none estab.	none estab.
1,2,4-Trimethylbenzene	25.00 ppm	none estab.	25.00 ppm	none estab.	none estab.	none estab.	none estab.
Unsaturated Hydrocarbons	None estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Ethyl Benzene	100.00 ppm	125.00 ppm	100.00 ppm	125.00 ppm	none estab.	none estab.	none estab.
Benzene	1.00 ppm	5.00 ppm	0.50 ppm	2.50 ppm	none estab.	none estab.	none estab.

**Section 3 - Hazards Identification**

**☆☆☆☆☆ Emergency Overview ☆☆☆☆☆**

<b>H</b>	1
<b>F</b>	3
<b>R</b>	0
<b>PPE</b>	†
	† Sec. 8

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.

OSHA WARNING LABEL:

DANGER!  
EXTREMELY FLAMMABLE.  
ASPIRATION (INADVERTENT SUCTION) OF LIQUID INTO THE LUNGS  
CAN PRODUCE CHEMICAL PNEUMONIA OR EVEN DEATH.  
CONTAINS BENZENE WHICH MAY CAUSE  
CANCER OR BE TOXIC TO BLOOD-FORMING ORGANS.

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

\*\*\*\*\*

**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. Intentional overexposure to high concentrations of gasoline vapors (such as gasoline sniffing) can cause nervous system and brain damage, convulsions and sudden death from cardiac arrest.

**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 defeat 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. The National Toxicology Program (NTP), OSHA and IARC have determined that there is sufficient evidence for the carcinogenicity of benzene in humans (Group 1A). IARC has determined that there is inadequate evidence for the carcinogenicity of gasoline engine exhaust in humans or animals. However, IARCIS overall evaluation on gasoline engine exhaust, in spite of the absence of carcinogenicity data, has resulted in the IARC designation of gasoline engine exhaust as possibly carcinogenic to humans (Group 2B) because of the presence of certain engine exhaust components.

**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:** If affected, move person to fresh air. If breathing is difficult, administer oxygen. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician. If symptoms or irritation occur with any exposure, call a physician.

**Eye Contact:** Flush eyes with large amounts of water for at least 15 minutes. If symptoms or irritation occur, call a physician.  
**Skin Contact:** Wash with soap and large amounts of water. Remove contaminated clothing. If symptoms or irritation occur, call a physician.  
**Ingestion:** Do not induce vomiting. Do not give liquids. Immediately call a physician.

*After first aid, get appropriate in-plant, paramedic, or community medical support.*

**Note to Physicians:**

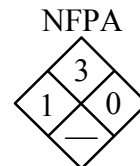
No Data Available

**Special Precautions/Procedures:**

No Data Available

**Section 5 - Fire-Fighting Measures**

**Flash Point:** - 50 F (- 45.56 C)  
**Flash Point Method:** COC  
**Burning Rate:** not available  
**Autoignition Temperature:** C.A. 495 F (257.22 C)  
  
**LEL:** 1.4 % (By Volume in Air)  
  
**UEL** 7.6 % (By Volume in Air)



**Flammability Classification:** Class 3 Flammable Liquid

**Extinguishing Media:** For small fires, Class B fire extinguishing media such as CO<sub>2</sub>, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Only those who are adequately trained and equipped with proper protective equipment should attempt fire fighting.

**Unusual Fire or Explosion Hazards:** This material has been determined to be a flammable liquid. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling, flashback may occur along vapor trail. For additional fire related information, see NFPA 30 or North American Emergency Response Guide 128.

**Hazardous Combustion Products:** Volatile and Extremely Flammable Liquid.

**Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways. Avoid use of straight water streams. Water may be ineffective in extinguishing low flash point fires, but can be used to cool exposed surfaces. Avoid excessive water spray application. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Keep run-off water out of sewers and water sources.

**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode. For small fires, Class B fire extinguishing media such as CO<sub>2</sub>, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Only those who are adequately trained and equipped with proper protective equipment should attempt fire fighting.

**Section 6 - Accidental Release Measures**

**Spill /Leak Procedures**

**Small Spills:** Contain liquid with sand or soil. Use suitable absorbent materials such as vermiculite, sand or clay to clean up residual liquids.

**Large Spills**

**Containment:** For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. Contain liquid with sand or soil.

**Cleanup:** Recover and return free liquid to proper containers. Use suitable absorbent materials such as vermiculite, sand or clay to clean up residual liquids.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120). Advise National Response Center (800-424-8802) if product has entered a waterway. Notify local health and pollution control agencies, if appropriate.

## Section 7 - Handling and Storage

**Handling Precautions:** For use as a motor fuel only. Gasoline should never be used as a solvent due to its flammable and potentially toxic properties. Siphoning by mouth can result in lung aspiration, which can be harmful or fatal. Avoid skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water. Portable containers of 12 gallons (45 liters) or less should never be filled with gasoline while they are in or on a motor vehicle or marine craft. Static electric discharge can ignite fuel vapors when filling non-grounded containers or vehicles on trailers. Containers should be placed on the ground. The nozzle spout must be kept in contact with the container before and during the entire filling operation. Use only approved containers.

**Storage Requirements:** Comply with all applicable OSHA, NFPA and consistent local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area. Do not expose to heat, open flame, oxidizers or other sources of ignition. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues.

**Regulatory Requirements:** Comply with all applicable OSHA, NFPA and consistent local requirements.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:** Use mechanical ventilation equipment that is explosion-proof. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Administrative Controls:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Respiratory Protection:** Observe respirator protection factor criteria cited in ANSI Z88.2. Self-contained breathing apparatus should be used for fire fighting. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator. Approved organic vapor chemical cartridge or supplied air respirators should be worn for exposures exceeding the TLV or STEL. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Skin Protection:** Use nitrile rubber, viton or PVA gloves for repeated or prolonged skin exposure.

**Eye Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields.

**Protective Clothing/Equipment:** No special protective clothing is normally required. Select protective clothing depending on industrial operations. Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear or Colored Liquid

**Odor:** Strong Hydrocarbon

**Odor Threshold:** 0.25 ppm

**Vapor Pressure:** 403 – 776 mm Hg 100 °F

**Vapor Density (Air=1):** 3 – 4

**Molecular Weight:** 100

**Density:** 5.9 – 6.3 lb./gal.

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 0.70 - 0.77

**pH:** No Data Available

**Water Solubility:** negligible

**Other Solubilities:** No Data Available

**Boiling Point:** 90 – 437 F

**Freezing Point:** No Data Available

**Melting Point:** No Data Available

**% Volatile:** 100 % by volume

**Evaporation Rate:** No Data Available

### Section 10 - Stability and Reactivity

**Stability:** The material is stable at 70 F, 760-mm pressure in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization will not occur.

**Chemical Incompatibilities:** Strong Oxidizing Agents such as Chlorates, Nitrates, and Peroxides.

**Conditions to Avoid:** Excessive Heat, Sources of Ignition

**Hazardous Decomposition Products:** Carbon Monoxide, Aldehydes, and Aromatic Hydrocarbons.

### Section 11- Toxicological Information

**Animal Studies:** Lifetime inhalation studies with full vaporized gasoline (61, 292 and 2,056 ppm) produced kidney damage and kidney tumors in male rats but not in female rats or male and female mice. Female mice developed a slightly higher incidence of liver tumors compared to controls at the highest exposure level. Results from separate studies with compounds producing similar effects, i.e., 1,4-dichlorobenzene and perchloroethylene, have shown that the kidney damage and kidney tumors develop via the formation of alpha-2u-globulin, a mechanism unique to the male rat. Humans do not form alpha-2u-globulin, therefore, tumors resulting from this mechanism are not relevant in humans. The biologic significance of the mouse liver tumor response with regard to human health risk is questionable.

**Gasoline Engine Exhaust Animal Studies:** Combustion of gasoline produces gases and particulates which include carbon monoxide, carbon dioxide, oxides of nitrogen and/or sulfur and hydrocarbons. Exposure to high concentrations of carbon monoxide (CO) can cause hypoxia via the formation of carboxyhemoglobin. Overexposure to CO can cause headache, nausea, nervous system depression, coma and death. Chronic inhalation studies of gasoline engine exhaust in mice, rats and hamsters did not produce any carcinogenic effects. Condensates/extracts of gasoline engine exhaust produced an increase in tumors compared to controls when testing by skin painting, subcutaneous injection, intratracheal instillation or implantation into the lungs.

**Summary of Health Effect Data on Gasoline Components:** This product contains benzene at a level of >0.17. Repeated or prolonged exposure to benzene at concentrations in excess of the TLV may cause serious injury to blood-forming organs. Significant chronic exposure to benzene vapor has been reported to produce various blood disorders ranging from anemia to cancer (different forms of leukemia) in man. Benzene produced tumors in rats and mice in lifetime chronic toxicity studies, but the response has not been consistent across species, strain, sex or route of exposure. Animal studies on benzene have demonstrated immune toxicity, chromosomal aberrations, testicular effects and alterations in reproductive cycles and embryo/fetotoxicity, but not teratogenicity.

Components of gasoline do not present a significant health risk in the concentrations present in gasoline at exposures not exceeding the exposure limits stated in section 2.

### Section 12 - Ecological Information

Product can cause fouling of shorelines and is harmful to aquatic life in low concentrations. There is no potential for accumulation in the food chain.

**Freshwater Toxicity:**

Bluegill: LC50 is 8 ppm @ 96 hours

Juvenile Shad: TLM is 90 ppm @ 24 hours

**Saltwater Toxicity:**

Mullet: LC50 is 2 ppm @ 96 hours

Grass Shrimp: LC50 is 1.5 ppm @ 96 hours

Menhaden: LC50 is 2 ppm @ 96 hrs.

Juvenile Shad: TLM is 91 ppm @ 24 hours

### Section 13 - Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, State, and Local regulations.

**Disposal Regulatory Requirements:** This material as supplied is not specifically listed as an EPA RCRA hazardous waste according to federal regulations (40 CFR 261-271). However, when discarded or disposed of, it may meet the criteria of an "ignitable" hazardous waste. This product could also contain benzene at >0.5 ppm and could exhibit the characteristics of "toxicity" as determined by the toxicity leaching procedure (TCLP). This material could also become a hazardous waste if mixed or contaminated with a listed hazardous waste. It is the responsibility of the user to determine if disposal material is hazardous according to Federal, State and Local regulations.

**Container Cleaning and Disposal:** Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. It is the responsibility of the user to determine if disposal container is hazardous according to Federal, State and Local regulations.

### Section 14 - Transport Information

#### DOT Transportation Data (49 CFR 172.101):

**Shipping Name:** GASOLINE

**Packaging Authorizations**

**Quantity Limitations**

**Shipping Symbols**

a) **Exceptions:** 173.150

a) **Passenger, Aircraft, or Railcar:** 5L

**Hazard Class:** 3

b) **Non-bulk Packaging:** 173.202

b) **Cargo Aircraft Only:** 60L

**ID No.:** UN 1203

c) **Bulk Packaging:** 173.242

**Vessel Stowage Requirements**

**Packing Group:** PG - II

a) **Vessel Stowage:** E

**Label:** FLAMMABLE LIQUID

b) **Other:** None

**Special Provisions (172.102):**

B33, B101, TB

### Section 15 - Regulatory Information

**OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910), Hazard Communication Standard (29 CFR 1910.1200):

This product has been evaluated and determined to be hazardous as defined in OSHA's Hazard Communication Standard.

**EPA Regulations:**

The following EPA hazard categories apply to this product:

SARA 311/312 Codes:

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA TITLE III (Superfund Amendments and Reauthorization Act Of 1986) - Sections 302, 304, 311, 312 and 313

SECTION 302 - Extremely Hazardous Substances (40 CFR PART 355): None

SECTION 304 - Emergency Release Notifications (40 CFR PART 355): None

SECTIONS 311 AND 312 - Material Safety Data Sheet Requirements (40 CFR PART 370):

The following EPA Hazard categories apply to this product:

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

Fire Hazard

MSDS'S or a list of MSDS'S and their hazards (See EPA Hazard Categories Above) may be required to be submitted to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC) and Local Fire Department (LFD) per Section 311 Requirements.

Per Section 312 Requirements, a Tier II or Tier I Form may be required to be submitted annually to the SERC, LEPC and LFD if applicable threshold reporting quantities are exceeded.

Current Federal Thresholds Are:

10,000 Pounds or more of an OSHA Hazardous Substance

Or

500 Pounds or the Threshold Planning Quantity, whichever is less,  
of an Extremely Hazardous Substance.

Note: Thresholds may vary according to Local and State Regulations.

SECTION 313 - Toxic Chemical Release reporting (40 CFR PART 372):

This product contains the following component(s)  
 (at a level of 1% or greater if hazardous; 0.1% or greater if carcinogenic)  
 That is/are identified on the Section 313 Toxic Chemical List:

--- Component ---	--- CAS Number ---
Benzene	71-43-2
Ethyl Benzene	100-41-4
1,2,4-Trimethylbenzene (Pseudocumene)	95-63-6
Toluene	108-88-3
Xylene	1330-20-7

EPA/TSCA (TOXIC SUBSTANCES CONTROL ACT) (40 CFR PART 710): This product and/or its components are listed on the TSCA inventory

RCRA Hazardous Waste Number (40 CFR 261.33): Not listed

RCRA Hazardous Waste Classification (40 CFR 261-271): This material as supplied is not specifically listed as an EPA RCRA hazardous waste according to federal regulations (40 CFR 261-271). However, when discarded or disposed of, it may meet the criteria of an "ignitable" hazardous waste. This product could also contain benzene at >0.5 ppm and could exhibit the characteristics of "toxicity" as determined by the toxicity leaching procedure (TCLP). This material could also become a hazardous waste if mixed or contaminated with a listed hazardous waste. It is the responsibility of the user to determine if disposal material is hazardous according to Federal, State and Local regulations.

**State Regulations:** Follow applicable State and Local regulations.

**Section 16 – Other Information**

**NFPA CLASSIFICATION**

**HEALTH: 1**  
**FIRE: 3**  
**REACTIVITY: 0**  
**OTHER: none**

**HMIS CLASSIFICATION**

**HEALTH: 1**  
**FIRE: 3**  
**REACTIVITY: 0**  
**PERSONAL PROTECTION: \***

**HAZARD RATING**

**0 - LEAST 1 - SLIGHT 2 - MODERATE 3 - HIGH 4 - EXTREME**

Prepared By: Will Poe Phone: 601-630-8319

Revision Notes: June 1, 2007 Changed date  
 June 1, 2005 Changed date  
 December 16, 2003 Changed date  
 January 1, 2001 Changed date  
 January 1, 2000 Changed date  
 October 16, 1998 Incorporated new format with additional safety information, contact

**COMMENTS:** \* See Section 8 for guidance in selection of personal protective equipment.

**Disclaimer:**

Ergon, 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.