

New Services



JAN 16 1991

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CITGO PETROLEUM CORPORATION
P. O. Box 3758
Tulsa, Oklahoma 74102

MATERIAL SAFETY DATA SHEET

Trade Name: CITGO Unleaded Gasoline

Commodity Code: 04-001

Synonyms: Benzin, Motor Gasoline, Petrol, Gas

CAS No.: Mixture (Refer to Section I) Technical Contact: (918) 495-5933
Medical Emergency: (318) 491-6215
Chemtrec Emergency: (800) 424-9300

Citgo Index No. (CIN): 0083

MATERIAL HAZARD EVALUATION
(Per OSHA's Hazard Communication
Standard [29 CFR Part 1910.1200]) (OHCS)

Health: DANGER: Contains Benzene - Cancer Hazard.
Harmful or fatal if swallowed. Vapors hazardous.

Precautionary Statement: DANGER: Extremely flammable liquid. Do not siphon by mouth. If swallowed, do not induce vomiting - call physician immediately.

HMIS Rating: Health 1; Flammability 3; Reactivity 0.

I. GENERIC COMPOSITION/COMPONENTS

<u>Components</u>	<u>CAS #</u>	<u>%</u>	<u>Hazard Data</u> *
Petroleum Distillates	Mixture	85-98	Oral: LDLo(human): 5-5.0g/kg
Benzene	71-43-2	<5	OSHA PEL: TWA 1ppm Oral: LD50(ms): 4700mg/kg.
Lower Aliphatic Alcohols	Mixture	0-11	Oral LD50(rat): >5.0g/kg Dermal LD50(rat): >5.0g/kg Inhn TC10(Human): ~25 ppm
Lower Aliphatic Ethers	Mixture	0-15	Oral LD50(rat): 4 ml/kg Dermal LD50(rbt): >10 ml/kg Eyes: Mild irritant

*The addition of octane improvers does not alter the toxicity of Premium Unleaded Gasoline.

Additional information on specific components is listed in the Environmental Data Section - Section IX.

II. PHYSICAL DATA

Physical Hazard Classification (Per 29 CFR Part 1910.1200)

<u>No</u> Combustible	<u>Yes</u> Flammable	<u>No</u> Pyrophoric
<u>No</u> Compressed Gas	<u>No</u> Organic Peroxide	<u>No</u> Reactivity
<u>No</u> Explosive	<u>No</u> Oxidizer	<u>Yes</u> Stable

Boiling Point, 760 mmHg,
°C(°F): 35(95)

Melting Point, °C(°F): NA

Vapor Pressure, mmHg (25°C): 510-760

Specific Gravity (60/60°F)
(H₂O=1): 0.75

Solubility in H₂O, % By Wt.: Negligible

Vapor Density (Air=1): 3-4

Evaporation Rate
(Butyl Acetate=1): <1

% Volatiles By Vol.: High

pH of Undiluted Product: ND

Appearance and Odor: Light yellow liquid*, gasoline odor.

* Typical appearance but may be colorless.

III. FIRE AND EXPLOSION DATA

Flash Point, COC, °C(°F): -43(-45)

NFPA*

Flash Point, PM, °C(°F): ND

Health: 1

Fire Point, COC, °C(°F): ND

Flammability: 3

Reactivity: 0

Flammability Limits in Air, Vol. %:

Lower: 1.4 Upper: 7.6

Extinguishing Media: CO₂, dry chemical, foam, water fog.

Special Fire Fighting Procedure: Wear self-contained breathing apparatus when in a confined area.

Unusual Fire or Explosion Hazard: Material is highly volatile and emits vapors which may be ignited by other ignition sources.

*Citgo assignment based on our evaluation per NFPA guidelines.

ND = No Data Hazard Rating: least-0; slight-1; moderate-2; high-3; extreme-4.
NA = Not Applicable

IV. REACTIVITY DATA

Stability: Stable

Conditions Contributing to Instability: High Temperature, flame.

Incompatibility: Strong oxidants, strong acids, caustics.

Hazardous Decomposition Products (thermal, unless otherwise specified):
CO₂, (CO under incomplete combustion).

Conditions Contributing to Hazardous Polymerization: None.

V. SPILL OR LEAK PROCEDURES

Procedures if Material is spilled:

Remove sources of ignition, ventilate area.

Small Spills: Take up with non combustible absorbant such as fullers earth or sand. Place into containers for later disposal.

Large Spills: Contain spill in earthen dikes for later recovery. Control ignition sources around spill area. A fire-fighting foam blanket on top of spill will reduce vapor release and the danger of fire.

Report spills as required to appropriate authorities.

Waste Disposal:

It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal. Check before disposing to be sure you are in compliance with all applicable laws and regulations.

Chemtrec/RCRA Emergency Hotline Number: 800-424-9346

Protective measures during repair and maintenance of contaminated equipment:
Refer to Section VII - Special Protection Information. Provide sufficient ventilation, eliminate all ignition sources. Wash exposed skin thoroughly with soap and water. Remove soiled clothing. Use impervious gloves if extended, direct contact is expected.

VI. HEALTH HAZARD DATA

Health Hazard Classification (Per 29 CFR Part 1910.1200)

<u>No</u> Carcinogen	<u>No</u> Corrosive
<u>Yes</u> Animal Carcinogen	<u>Yes</u> Irritant - respiratory
<u>No</u> Suspect Carcinogen	<u>No</u> Sensitizer
<u>No</u> Mutagen	<u>No</u> Teratogen
<u>No</u> Highly Toxic	<u>Yes</u> Target Organ: hematopoietic system; respiratory irritant
<u>No</u> Toxic	

Product listed as Carcinogen or Potential Carcinogen by:

NTP No, IARC No, OSHA No, Other Yes (API Studies)

Toxicity Summary: Moderately toxic: 0.3 to 8 oz. may be a lethal oral dose for 150 lb. human.

Major Route(s) of entry: Vapors, inhalation, and skin contact.

Acute Exposure Symptoms

Inhalation: Moderate risk of vapor intoxication. Major risk is enclosed spaces with poor ventilation. Euphoria, lung irritation and edema, headache, dizziness, drowsiness, convulsions, coma, cyanosis, generalized depression.

Dermal Contact: Defatting with drying and cracking - can lead to dermatitis and secondary infection.

Eye Contact: Irritant.

Ingestion: Burning of mouth and upper GI tract, vomiting and diarrhea. Less than 1 oz. with retention: general depression, sedation, respiratory depression, coma.

Chronic Exposure: Skin: drying and cracking (dermatitis)
Inhalation: Benzene has been classified as a leukemogen, and may produce anemia, leukemia from repeated or prolonged exposure to high concentrations. The American Petroleum Institute sponsored chronic inhalation studies of unleaded gasoline vapors which indicate that unleaded gasoline is carcinogenic to laboratory animals.

Other Special

Effects: None.

Medical Conditions aggravated by exposure: Pre-existing dermatosis.

First Aid and Emergency Procedures for Acute Effect

Inhalation: Remove to fresh air. Respiratory support, if necessary. Seek medical aid.

Dermal: Wash with soap and water. Do not wear heavily contaminated clothing before cleaning.

Eyes: Flush with large volumes of water. Seek medical aid.

Ingestion: Do not induce vomiting. Seek medical aid.

Notes to Physician: This is a low-viscosity material with a Saybolt viscosity at 100°F of less than 40 SUS. If ingestion and vomiting occurs, there exists a high pulmonary aspiration hazard, possibly producing lipid pneumonia. For quantities above a few drops, use careful gastric lavage with tight fitting, cuffed endotracheal tube.

VII. SPECIAL PROTECTION INFORMATION

Ventilation Requirements: Use in well ventilated area. In confined spaces mechanical ventilation may be required to keep levels of certain components below mandated standards. Responsible individuals should evaluate air concentrations of specific regulated chemicals.

TLV: TWA (Time Weighted Average): 300 ppm (900 mg/m³);
STEL (Short Term Exposure): 500 ppm (1500 mg/m³) ACGIH-1987-88.

Specific Personal Protective Equipment:

- Respiratory: If high vapor concentration is expected, use respirator approved for organic vapors.
- Eyes: Safety goggles, or chemical splash goggles if splashing is anticipated.
- Dermal: Oil impervious such as Nitrile-Butadiene rubber gloves if frequent prolonged contact is expected.
- Other Clothing or Equipment: Wear body-covering work clothes to avoid prolonged or repeated exposure. (Gasoline soaked clothing is a fire hazard and should be removed.) Launder soiled work clothes before reuse. Treat as leukemogenic and potentially carcinogenic material.

VIII. TRANSPORTATION AND SPECIAL PRECAUTIONS

Storage: Keep container tightly closed and away from heat and flame. Do not store with strong oxidizers.

Caution: Empty containers may contain product residue which could include flammable or explosive vapors.

Consult appropriate Federal, State and Local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

DOT Information:

Proper Shipping Name:	Gasoline.
Hazard Class:	Flammable liquid.
Hazard Identification Number:	UN 1203.
Placard:	Flammable liquid.
Packaging Exceptions/Restrictions:	Refer to: 49CFR173.118 49CFR173.119

IX. ENVIRONMENTAL DATA

Product Name: CITGO Unleaded Gasoline - 91 Octane

Commodity Code: 04-001

SARA TITLE III

Section 313 - Toxic Chemicals

This product contains toxic chemicals of section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

<u>Component</u>	<u>CAS#</u>	<u>%</u>
Benzene	71-43-2	0-5
Tertiary Butyl Alcohol	75-65-0	0-10
Ethyl Benzene	100-41-4	0-5
Methyl-t-butyl ether	1634-04-4	0-15
Toluene	108-88-3	0-25
1,2,4 trimethyl benzene	95-63-6	0-5
Xylene (mixed isomers)	1330-20-7	0-25

Section 311 - Hazard Categories

<u>No</u> Not Applicable	<u>Yes</u> Fire Hazard
<u>No</u> Acute (Immediate Health Hazard)	<u>No</u> Sudden Release of Pressure Hazard
<u>Yes</u> Chronic (Delayed Health Hazard)	<u>No</u> Reactive Hazard

Section 302/(A) - Extremely Hazardous Substances (RQ=Reportable Quantity)
(TPQ=Threshold Planning Quantity)

This product does not contain Extremely Hazardous Substances of section 302/(A).

<u>Component</u>	<u>CAS#</u>	<u>%</u>	<u>RQ lbs</u>	<u>TPQ lbs</u>
None	-	-	-	-

Clean Water Act

Under Section 311 (b) (4) of the Clean Water Act, discharges of crude oil and petroleum products in any kind or form to surface waters must be immediately reported to the National Response Center: 800-424-8802.

Comprehensive Environmental, Response, Compensation & Liability Act

(CERCLA) - Section 102 Hazardous Substances

<u>Component</u>	<u>CAS#</u>	<u>%</u>	<u>RQ lbs</u>
Petroleum and petroleum fractions are excluded from the list of CERCLA hazardous substances by section 101(14) of CERCLA.			

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NA = Not Applicable

LAS/04-001

X. LABELING

DANGER: CONTAINS BENZENE - CANCER HAZARD

EXTREMELY FLAMMABLE

HARMFUL IF SWALLOWED

HANDLING:

Keep away from heat, sparks and flames.

Keep container closed.

Do not breathe vapor.

Use only with adequate ventilation.

Do not siphon by mouth.

This product contains benzene and certain other hydrocarbons which are potentially toxic and carcinogenic. Avoid repeated or prolonged contact with skin.

FIRST AID:

If swallowed, do not induce vomiting.

Call a physician immediately.

In case of contact, remove contaminated clothing immediately, and wash thoroughly with soap and water.

All statements, information, and data provided in this material safety data sheet are believed to be accurate and reliable, but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied, on our part. Users should make their own investigations to determine the suitability of the information or products for their particular purpose. Nothing contained herein is intended as permission, inducement or recommendation to violate any laws or to practice any invention covered by existing patents.

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NA = Not Applicable

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