



INDEPENDENT ELECTRICAL
CONTRACTORS

Safety Data Sheet – Gasoline, Unleaded –Sample

Please note: the following is not intended to represent factual information for this product. It is to be used during training as an example of what a new safety data sheet will look like under the new Hazard Communication Standard requirements. As you are reading through this document you will notice 16 sections shaded in blue. These are the new required 16 sections that you will see on all Safety Data Sheets once the new standard rules are applied. Any section shaded in yellow is additional information that would not be seen on a normal SDS. If there is no yellow area included under a section it is because we feel that area is self explanatory.

Section 1: Identification

In this section you will find the product name which will be listed on the label as well as any contact information on the manufacturer.

Product name : Gasoline, Unleaded

Synonyms :

Blend of Highly Flammable Petroleum Distillates, Regular, Mid-Grade, Premium,
888100008809

SDS Number :

888100008809 Version : 1.1

Product Use Description :

Fuel

Company :

Big Joe's Oil Corp.
555 Oil Lane, Lubbock, TX 77777

Big Joe's Call Center :

(877) 783-7676

Chemtrec :

(800) 424-9300 (Emergency Contact)

Section 2: Hazard(s) Identification

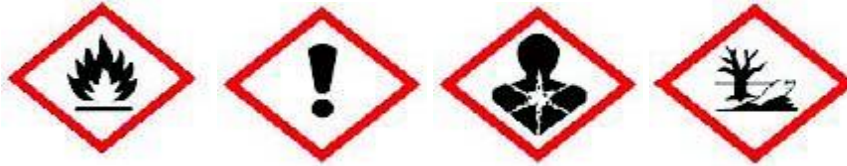
When looking at the different classifications of hazards this chemical meets you will see category numbers to tell you how severe the hazard is. Please remember, these numbers **ARE NOT** the same as the old NFPA / HMIS system. In this case, the numbering generally starts at 1(most hazardous) and ends at 5(Least hazardous). There are letters used in certain categories as well. Always remember, the lower the number or letter, the more severe the hazard.

Classifications :

Flammable Liquid – Category 1
Aspiration Hazard – Category 1
Carcinogenicity – Category 2

Specific Target Organ Toxicity (Repeated Exposure) – Category 2
Specific Target Organ Toxicity (Single Exposure) – Category 3
Skin Irritation – Category 2 Eye Irritation – Category 2B
Chronic Aquatic Toxicity – Category 2

Pictograms :



Signal Word:

Danger

Hazard Statements:

Extremely flammable liquid and vapor.
May be fatal if swallowed and enters airways – do not siphon gasoline by mouth.
Suspected of causing blood cancer if repeated over-exposure by inhalation and/or skin contact occurs.
May cause damage to liver, kidneys and nervous system by repeated and prolonged inhalation or skin contact. Causes eye irritation. Can be absorbed through skin.
May cause drowsiness or dizziness. Extreme exposure such as intentional inhalation may cause unconsciousness, asphyxiation and death.
Repeated or prolonged skin contact can cause irritation and dermatitis.
Harmful to aquatic life.

Precautionary statements

Prevention :

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames, welding and hot surfaces.
No smoking.
Keep container tightly closed.
Ground and/or bond container and receiving equipment.
Use explosion-proof electrical equipment.
Use only non-sparking tools (if tools are used in flammable atmosphere).
Take precautionary measures against static discharge.
Wear gloves, eye protection and face protection (as needed to prevent skin and eye contact with liquid).
Wash hands or liquid-contacted skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe vapors.
Use only outdoors or in a well-ventilated area.

Response :

In case of fire: Use dry chemical, CO₂, water spray or fire fighting foam to extinguish.

If swallowed: Immediately call a poison center, doctor, hospital emergency room, medical clinic or 911. Do NOT induce vomiting. Rinse mouth.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eye: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin or eye irritation persists, get medical attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Get medical attention if you feel unwell.

Storage :

Store in a well ventilated place. Keep cool. Store locked up. Keep container tightly closed . Use only approved containers. Some containers not approved for gasoline may dissolve and release flammable gasoline liquid and vapors.

Disposal :

Dispose of contents/containers to approved disposal site in accordance with local, regional, national, and/or international regulations.

Section 3: Composition/Information on Ingredients

This section lists the ingredients of this chemical. For Exposure limits please refer to section 8 of this document.

Component	CAS-No.	Weight %
Gasoline, natural; Low boiling point naphtha	8006-61-9	10 -30%
Toluene	108-88-3	10 -30%
Xylene	1330-20-7	10 -30%
Ethanol; ethyl alcohol	64-17-5	0-8.2%
Trimethylbenzene	25551-13-7	1 -5%
Isopentane; 2-methylbutane	78-78-4	1 -5%
Naphthalene	91-20-3	1 -5%
Benzene	71-43-2	Less than 1.3%
Pentane	109-66-0	1 -5%
Cyclohexane	110-82-7	1 -5%
Ethylbenzene	100-41-4	1 -5%
Butane	106-97-8	1 -20%
Heptane [and isomers]	142-82-5	0.5 -0.75%
N-hexane	110-54-3	0.5 -0.75%

Section 4: First-Aid Measures

This area will tell you what to do if there is an exposure to this chemical. If there is an exposure situation that requires emergency care, remember to bring a copy of this document as there are specific physician notes listed.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.

Skin contact :

In case of contact, immediately flush skin with plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Contaminated leather, particularly footwear, must be discarded. Note that contaminated clothing may be a fire hazard. Seek medical advice if symptoms persist or develop.

Eye contact :

Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice if symptoms persist or develop.

Ingestion :

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.

Notes to physician :

Symptoms: Dizziness, Discomfort, Headache, Nausea, Kidney disorders, Liver disorders. Aspiration may cause pulmonary edema and pneumonitis. Swallowing gasoline is more likely to be fatal for small children than adults, even if aspiration does not occur.

Section 5: Fire-Fighting Measures

This section lists how to extinguish a fire but more importantly any specific hazards that can be created should this product burn.

Suitable extinguishing media :

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray or fire fighting foam. LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire exposed containers. Keep containers and surroundings cool with water spray.

Specific hazards during fire fighting:

Extremely flammable liquid and vapor. This material is combustible/flammable and is sensitive to fire, heat, and static discharge.

Special protective equipment for fire-fighters :

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full face-piece and full protective clothing.

Further information :

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further

minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental Release Measures

Personal precautions :

Evacuate personnel to safe areas. Ventilate the area. Remove all sources of ignition. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental precautions :

Discharge into the environment must be avoided. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up :

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

Section 7: Handling and Storage

Critical information on how this chemical will react to certain physical conditions will be listed here as well as safe storage conditions.

Precautions for safe handling :

Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in areas with intrinsically safe electrical classification.

Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulators), and may form ignitable vapor-air mixtures in storage tanks or other containers. Precautions to prevent static-initiated fire or explosion during transfer, storage or handling, include but are not limited to these examples:

(1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators.

(2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha).

(3) Storage tank level floats must be effectively bonded.

For more information on precautions to prevent static-initiated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).

Conditions for safe storage, including incompatibilities :

Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Reports suggest that government-mandated ethanol, if present, may not be compatible with fiberglass gasoline tanks. Ethanol may dissolve fiberglass resin, causing engine damage and possibly allow leakage of explosive gasoline. Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids.

No decomposition if stored and applied as directed. Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Store only in containers approved and labeled for gasoline.

Section 8: Exposure Controls/Personal Protection

Listed in the first part of section 8 you will see all the listed exposure limits for each chemical. This will be covered in your training class. This section will tell you any **specific PPE** required such as type of hand protection or the need for respirators.

Exposure Guidelines

List	Components	CAS-No.	Type:	Value
OSHA	Benzene	71-43-2	TWA	1 ppm
		71-43-2	STEL	5 ppm
		71-43-2	OSHA_ACT	0.5 ppm
OSHA Z1	Xylene	1330-20-7	PEL	100 ppm 435 mg/m3
	Ethanol; Ethyl alcohol	64-17-5	PEL	1,000 ppm 1,900 mg/m3
	Naphthalene	91-20-3	PEL	10 ppm 50 mg/m3
	Cyclohexane	110-82-7	PEL	300 ppm 1,050 mg/m3
	Ethylbenzene	100-41-4	PEL	100 ppm 435 mg/m3
	Heptane [and isomers]	142-82-5	PEL	500 ppm 2,000 mg/m3
	N-hexane	110-54-3	PEL	500 ppm 1,800 mg/m3

ACGIH	Toluene	108-88-3	TWA	50 ppm
	Xylene	1330-20-7	TWA	100 ppm
		1330-20-7	STEL	150 ppm
	Ethanol; Ethyl alcohol	64-17-5	TWA	1,000 ppm
	Trimethylbenzene	25551-13-7	TWA	25 ppm
	Isopentane; 2-Methylbutane	78-78-4	TWA	600 ppm
	Naphthalene	91-20-3	TWA	10 ppm
		91-20-3	STEL	15 ppm

Section 8 – Continued PPE

Engineering measures : Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use only intrinsically safe electrical equipment approved for use in classified areas.

Eye protection : Safety glasses or goggles are recommended where there is a possibility of splashing or spraying. Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection : Gloves constructed of nitrile or neoprene are recommended. Consult manufacturer specifications for further information.

Skin and body protection : If needed to prevent skin contact, chemical protective clothing such as of DuPont TyChem®, Saranex or equivalent recommended based on degree of exposure. Flame resistant clothing such as Nomex® is recommended in areas where material is stored or handled.

Respiratory protection : A NIOSH/ MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection. Use a NIOSH/ MSHA-approved positive-pressure supplied-air respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Work / Hygiene practices : Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

Section 9: Physical and Chemical Properties

Important information in this area could include:

- **Flash point (what temperature will this product produce ignitable vapors?)**

- **Upper and lower explosive limits (important if using in a confined space)**
- **Vapor density (when in vapor form will this product be lighter or heavier than air?)**

Appearance : Clear to straw colored liquid

Odor : Characteristic hydrocarbon-like

Odor threshold : 0.5 - 1.1 ppm

pH: Not applicable

Melting point/freezing point About -101°C (-150°F)

Initial boiling point & range

Flash point < -21°C (-5.8°F)

Boiling point varies: 30 – 200°C (85 – 392°F)

Evaporation rate : Higher initially and declining as lighter components evaporate

Upper explosive limit 7.6 %(V)

Lower explosive limit 1.3 %(V)

Vapor pressure 345 -1,034 hPa at 37.8 °C (100.0 °F)

Vapor density (air = 1) Approximately 3 to 4

Relative density
(water = 1) 0.8 g/mL

Solubility (in water) Negligible

Partition coefficient
(n-octanol/water) 2 – 7 as log Pow

Auto-ignition
temperature Approximately 250°C (480°F)

Decomposition
temperature Will evaporate or boil and possibly ignite before decomposition occurs.

Section 10: Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information. This section is broken into three parts: reactivity, chemical stability, and other.

Reactivity : Vapors may form explosive mixture with air.

Chemical stability	: Stable under normal conditions.
Possibility of hazardous Reactions	: Can react with strong oxidizing agents
Conditions to avoid	: Avoid high temperatures, open flames, sparks, welding.
Hazardous decomposition	: Ignition and burning can release carbon monoxide, carbon dioxide.

Section 11: Toxicological Information

This section contains information on routes of entry and conditions that can result from both short (acute) and long term (chronic) exposure. If this product contains a chemical that has been known to cause cancer (carcinogen) it will be listed in this section.

Irritating to skin. Can be partially absorbed through skin. Irritating to eyes.

Aspiration hazard if liquid is inhaled into lungs, particularly from vomiting after ingestion. Aspiration may result in chemical pneumonia, severe lung damage, respiratory failure and even death. Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death may occur.

Inhalation and further information

Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, over excitation. Exposure to very high levels can result in unconsciousness and death.

Repeated over-exposure may cause liver and kidney injuries. Components of the product may affect the nervous system.

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as plastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

Section 12: Ecological Information *(Not mandated by OSHA but part of GHS SDS Requirements)*

Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations.

Section 13 Disposal Considerations *(Not mandated by OSHA but part of GHS SDS Requirements)*

Disposal : Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORT INFORMATION *(Not mandated by OSHA but part of GHS SDS Requirements)*

CFR

Proper shipping name : Petrol
UN-No. : 1203
Class : 3
Packing group : II

TDG

Proper shipping name : Gasoline
UN-No. : UN1203
Class : 3
Packing group : II

IATA Cargo Transport

UN UN-No. : UN1203
Description of the goods : Gasoline
Class : 3
Packaging group : II
ICAO-Labels : 3
Packing instruction (cargo aircraft): 364
Packing instruction (cargo aircraft): Y341

Section 15: Regulatory Information (Not mandated by OSHA but part of GHS SDS Requirements)

OSHA Hazards :

Flammable liquid
Highly toxic by ingestion
Moderate skin irritant
Severe eye irritant
Carcinogen

TSCA Status :

On TSCA Inventory

DSL Status : .

All components are on the Canadian DSL list.

SARA 311/312 Hazards :

Fire Hazard
Acute Health Hazard
Chronic Health Hazard

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil. Fractions of crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply.

California Prop. 65 :

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Toluene 108-88-3
Benzene 71-43-2

Section 16: Other InformationFurther information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The

information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

