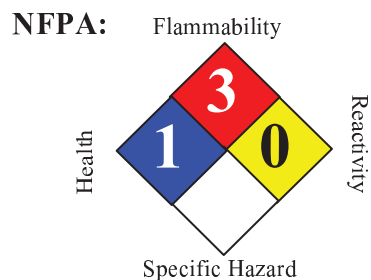


# Safety Data Sheet

## Gasoline, Unleaded



### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

|                         |   |                                                                                             |                                 |   |                |
|-------------------------|---|---------------------------------------------------------------------------------------------|---------------------------------|---|----------------|
| Product name            | : | Gasoline, Unleaded                                                                          |                                 |   |                |
| Synonyms                | : | Blend of Highly Flammable Petroleum Distillates, Regular, Mid-Grade, Premium , 888100008809 |                                 |   |                |
| SDS Number              | : | 888100008809                                                                                | Version                         | : | 1.6            |
| Product Use Description | : | Fuel                                                                                        |                                 |   |                |
| Company                 | : | For: Tesoro Refining & Marketing Co.<br>19100 Ridgewood Parkway, San Antonio, TX 78259      |                                 |   |                |
| Tesoro Call Center      | : | (877) 783-7676                                                                              | Chemtrec<br>(Emergency Contact) | : | (800) 424-9300 |

### SECTION 2. HAZARDS IDENTIFICATION

|                        |   |                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Classifications</b> | : | Flammable Liquid – Category 1 or 2 depending on formulation.<br>Aspiration Hazard – Category 1<br>Carcinogenicity – Category 2<br>Specific Target Organ Toxicity (Repeated Exposure) – Category 2<br>Specific Target Organ Toxicity (Single Exposure) – Category 3<br>Skin Irritation – Category 2<br>Eye Irritation – Category 2B<br>Chronic Aquatic Toxicity – Category 2 |
|------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Pictograms



|                    |   |               |
|--------------------|---|---------------|
| <b>Signal Word</b> | : | <b>Danger</b> |
|--------------------|---|---------------|

#### 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, CO<sub>2</sub>, 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**

| 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

|                    |                                                                                                                                                                                                                                                                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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

|                                                |                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing media                   | : SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO <sub>2</sub> , 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 facepiece and full protective clothing.                                                                              |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Further information</b> | : 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

|                                  |                                                                                                                                                                                                            |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>      | : 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). |
| <b>Environmental precautions</b> | : Discharge into the environment must be avoided. If the product contaminates rivers and lakes or drains inform respective authorities.                                                                    |
| <b>Methods for cleaning up</b>   | : 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

|                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b>                            | :<br><p>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.</p> <p>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-initated fire or explosion during transfer, storage or handling, include but are not limited to these examples:</p> <ol style="list-style-type: none"><li>(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.</li><li>(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).</li><li>(3) Storage tank level floats must be effectively bonded.</li></ol> <p>For more information on precautions to prevent static-initated 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).</p> |
| <b>Conditions for safe storage, including incompatibilities</b> | :<br><p>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".</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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

### 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                |
|         | Benzene                    | 71-43-2    | TWA      | 0.5 ppm               |
|         |                            | 71-43-2    | STEL     | 2.5 ppm               |
|         | Pentane                    | 109-66-0   | TWA      | 600 ppm               |
|         | Cyclohexane                | 110-82-7   | TWA      | 100 ppm               |
|         | Ethylbenzene               | 100-41-4   | TWA      | 100 ppm               |
|         |                            | 100-41-4   | STEL     | 125 ppm               |
|         | Heptane [and isomers]      | 142-82-5   | TWA      | 400 ppm               |
|         |                            | 142-82-5   | STEL     | 500 ppm               |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |     |        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|--------|
|                                 | N-hexane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 110-54-3 | TWA | 50 ppm |
| <b>Engineering measures</b>     | : 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |     |        |
| <b>Eye protection</b>           | : 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |     |        |
| <b>Hand protection</b>          | : Gloves constructed of nitrile or neoprene are recommended. Consult manufacturer specifications for further information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |     |        |
| <b>Skin and body protection</b> | : 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |     |        |
| <b>Respiratory protection</b>   | : 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. |          |     |        |
| <b>Work / Hygiene practices</b> | : 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

|                                          |                                                                  |
|------------------------------------------|------------------------------------------------------------------|
| <b>Appearance</b>                        | : Clear to straw colored liquid                                  |
| <b>Odor</b>                              | : Characteristic hydrocarbon-like                                |
| <b>Odor threshold</b>                    | 0.5 - 1.1 ppm                                                    |
| <b>pH</b>                                | : Not applicable                                                 |
| <b>Melting point/freezing point</b>      | About -101°C (-150°F)                                            |
| <b>Initial boiling point &amp; range</b> | Boiling point varies: 30 – 200°C (85 – 392°F)                    |
| <b>Flash point</b>                       | < -21°C (-5.8°F)                                                 |
| <b>Evaporation rate</b>                  | : Higher initially and declining as lighter components evaporate |
| <b>Flammability (solid, gas)</b>         | : Flammable vapor released by liquid                             |

|                                                                                                                |                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>(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.                                                                                                                                                                                                                                                                              |
| Kinematic viscosity                                                                                            | 0.64 to 0.88 mm <sup>2</sup> /s range reported for gasoline                                                                                                                                                                                                                                                                                          |
| Conductivity<br>(conductivity can be reduced<br>by environmental factors such<br>as a decrease in temperature) | : Hydrocarbon liquids without static dissipater additive may have conductivity below 1 picoSiemens per meter (pS/m). The highest electro-static ignition risks are associated with "ultra-low conductivities" below 5 pS/m. See Section 7 for sources of information on defining safe loading and handling procedures for low conductivity products. |

## SECTION 10. STABILITY AND REACTIVITY

|                                    |                                                                                                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | : Vapors may form explosive mixture with air. Hazardous polymerization does not occur.                                                                                             |
| Chemical stability                 | : Stable under normal conditions.                                                                                                                                                  |
| Possibility of hazardous reactions | Can react with strong oxidizing agents, peroxides, alkaline products and strong acids. Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently. |
| Conditions to avoid                | : Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Avoid static charge accumulation and discharge (see Section 7).                       |
| Hazardous decomposition products   | : Ignition and burning can release carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).                                                                         |

## SECTION 11. TOXICOLOGICAL INFORMATION

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Skin contact | : Irritating to skin. Can be partially absorbed through skin.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Eye contact  | : Irritating to eyes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Ingestion    | : 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 aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

**Component:**

|                                              |           |                                                                                      |
|----------------------------------------------|-----------|--------------------------------------------------------------------------------------|
| Gasoline, natural; Low boiling point naphtha | 8006-61-9 | <u>Acute oral toxicity:</u> LD50 rat<br>Dose: 18.8 mg/kg                             |
|                                              |           | <u>Acute inhalation toxicity:</u> LC50 rat<br>Dose: 20.7 mg/l<br>Exposure time: 4 h  |
|                                              |           | <u>Skin irritation:</u> Classification: Irritating to skin.                          |
|                                              |           | <u>Eye irritation:</u> Classification: Irritating to eyes.                           |
| Toluene                                      | 108-88-3  | <u>Acute oral toxicity:</u> LD50 rat<br>Dose: 636 mg/kg                              |
|                                              |           | <u>Acute dermal toxicity:</u> LD50 rabbit<br>Dose: 12,124 mg/kg                      |
|                                              |           | <u>Acute inhalation toxicity:</u> LC50 rat<br>Dose: 49 mg/l<br>Exposure time: 4 h    |
|                                              |           | <u>Skin irritation:</u> Classification: Irritating to skin.                          |
|                                              |           | <u>Eye irritation:</u> Classification: Irritating to eyes.                           |
| Xylene                                       | 1330-20-7 | <u>Acute oral toxicity:</u> LD50 rat<br>Dose: 2,840 mg/kg                            |
|                                              |           | <u>Acute dermal toxicity:</u> LD50 rabbit<br>Dose: ca. 4,500 mg/kg                   |
|                                              |           | <u>Acute inhalation toxicity:</u> LC50 rat<br>Dose: 6,350 mg/l<br>Exposure time: 4 h |
|                                              |           | <u>Skin irritation:</u> Classification: Irritating to skin.                          |
|                                              |           | <u>Eye irritation:</u> Classification: Irritating to eyes.                           |
| Ethanol; Ethyl alcohol                       | 64-17-5   | <u>Acute oral toxicity:</u> LD50 rat                                                 |

Dose: 6,200 mg/kg

Acute dermal toxicity: LD50 rabbit

Dose: 19,999 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 8,001 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Eye irritation: Classification: Irritating to eyes.

**Naphthalene**

91-20-3

Acute oral toxicity: LD50 rat

Dose: 2,001 mg/kg

Acute dermal toxicity: LD50 rat

Dose: 2,501 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 101 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Eye irritation: Classification: Irritating to eyes.

Carcinogenicity: N11.00422130

**Benzene**

71-43-2

Acute oral toxicity: LD50 rat

Dose: 930 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 44 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Eye irritation: Classification: Irritating to eyes.

Result: Risk of serious damage to eyes.

**Pentane**

109-66-0

Acute oral toxicity: LD50 rat

Dose: 2,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 364 mg/l

Exposure time: 4 h

Skin irritation: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye irritation: Classification: Irritating to eyes.

**Cyclohexane**

110-82-7

Acute dermal toxicity: LD50 rabbit

Dose: 2,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 14 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.

Eye irritation: Classification: Irritating to eyes.

**Ethylbenzene**

100-41-4

Acute oral toxicity: LD50 rat

Dose: 3,500 mg/kg

Acute dermal toxicity: LD50 rabbit

Dose: 15,500 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 18 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.Eye irritation: Classification: Irritating to eyes.

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**Heptane [and isomers]**

142-82-5

Acute oral toxicity: LD50 rat

Dose: 15,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 103 g/m3

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.Eye irritation: Classification: Irritating to eyes.**N-hexane**

110-54-3

Acute oral toxicity: LD50 rat

Dose: 25,000 mg/kg

Acute dermal toxicity: LD50 rabbit

Dose: 2,001 mg/kg

Acute inhalation toxicity: LC50 rat

Dose: 171.6 mg/l

Exposure time: 4 h

Skin irritation: Classification: Irritating to skin.Eye irritation: Classification: Irritating to eyes.Teratogenicity: N11.00418960**Carcinogenicity**

|                   |   |                                                                                                                                                                                            |
|-------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NTP</b>        | : | Naphthalene (CAS-No.: 91-20-3)<br>Benzene (CAS-No.: 71-43-2)                                                                                                                               |
| <b>IARC</b>       | : | Gasoline, natural; Low boiling point naphtha (CAS-No.: 8006-61-9)<br>Naphthalene (CAS-No.: 91-20-3)<br>Benzene (CAS-No.: 71-43-2)<br>Ethylbenzene (CAS-No.: 100-41-4)                      |
| <b>OSHA</b>       | : | Benzene (CAS-No.: 71-43-2)                                                                                                                                                                 |
| <b>CA Prop 65</b> | : | WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.<br>Toluene (CAS-No.: 108-88-3)<br>Benzene (CAS-No.: 71-43-2) |

**SECTION 12. ECOLOGICAL INFORMATION**

**Additional ecological information** : Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations.

**Component:****Toluene**

108-88-3

Toxicity to fish:

LC50

Species: Carassius auratus (goldfish)

Dose: 13 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 11.5 mg/l

Exposure time: 48 h

Toxicity to algae:

IC50

Species: Selenastrum capricornutum (green algae)

Dose: 12 mg/l

Exposure time: 72 h

Ethanol; Ethyl alcohol

64-17-5

Toxicity to fish:

LC50

Species: Leuciscus idus (Golden orfe)

Dose: 8,140 mg/l

Exposure time: 48 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 9,268 - 14,221 mg/l

Exposure time: 48 h

Isopentane; 2-Methylbutane

78-78-4

Toxicity to fish:

LC50

Species: Oncorhynchus mykiss (rainbow trout)

Dose: 3.1 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 2.3 mg/l

Exposure time: 96 h

Naphthalene

91-20-3

Toxicity to algae:

EC50

Species:

Dose: 33 mg/l

Exposure time: 24 h

Pentane

109-66-0

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 9.74 mg/l

Exposure time: 48 h

Cyclohexane

110-82-7

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 3.78 mg/l

Exposure time: 48 h

Heptane [and isomers]

142-82-5

Toxicity to fish:

LC50

Species: Carassius auratus (goldfish)

Dose: 4 mg/l

Exposure time: 24 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 1.5 mg/l

Exposure time: 48 h

N-hexane

110-54-3

Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: 2.5 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 2.1 mg/l

Exposure time: 48 h

**SECTION 13. DISPOSAL CONSIDERATIONS**

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

**SECTION 14. TRANSPORT INFORMATION****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

**IATA Passenger Transport**

UN UN-No. : UN1203  
Description of the goods : Gasoline  
Class : 3  
Packaging group : II  
ICAO-Labels : 3  
Packing instruction (passenger aircraft) : 353  
Packing instruction (passenger aircraft) : Y341

**IMDG-Code**

UN-No. : UN 1203

|                          |            |
|--------------------------|------------|
| Description of the goods | : Gasoline |
| Class                    | : 3        |
| Packaging group          | : II       |
| IMDG-Labels              | : 3        |
| EmS Number               | : F-E S-E  |
| Marine pollutant         | : No       |

**SECTION 15. REGULATORY INFORMATION**

|                      |                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------|
| OSHA Hazards         | : Flammable liquid<br>Highly toxic by ingestion<br>Moderate skin irritant<br>Severe eye irritant<br>Carcinogen |
| TSCA Status          | : On TSCA Inventory                                                                                            |
| DSL Status           | : . All components are on the Canadian DSL list.                                                               |
| SARA 311/312 Hazards | : Fire Hazard<br>Acute Health Hazard<br>Chronic Health Hazard                                                  |

**CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIROMENT)**

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 INFORMATION****Further 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.

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6, 8, 10, 12, 14, 16, 64, 68, 91, 112, 306, 1092, 1106, 1500, 1570, 1571, 1651, 1652, 1654, 1700, 1701, 1702, 1710, 1711, 1714, 1726, 1729, 1730, 1732, 1733, 1826, 1848, 1880, 1950