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# MATERIAL SAFETY DATA SHEET

## SECTION 1

## PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT

**Product Name:** GASOLINE, UNLEADED AUTOMOTIVE

**Product Description:** Hydrocarbons and Additives

**Product Code:** 123455-20, 9700, 977032, 977217, 977306, 977360, 977371, 977381, 977445, 977562, 977767, 977920, 979533, 97A039, 97A065, 97A078, 97A087, 97A102, 97A108, 97A146, 97A147, 97A152, 97A193, 97A200, 97A240, 97A266, 97A273, 97A290, 97A305, 97A316, 97A317, 97A328, 97A347, 97A380, 97A404, 97A424, 97A431, 97A441, 97A514, 97A556, 97A557, 97A613, 97A634, 97A653, 97A655, 97A659, 97A686, 97A696, 97A703, 97A712, 97A726, 97A736, 97A746, 97A767, 97A794, 97A798, 97A827, 97A848, 97A851, 97A876, 97A883, 97A907, 97A934, 97A948, 97A949, 97A960, 97A983, 97A989, 97AV99, 97AW00, 97AW01, 97AW38, 97AZ87, 97AZ88, 97AZ89, 97AZ90, 97AZ91, 97AZ92, 97AZ93, 97AZ94, 97AZ95, 97AZ96, 97AZ97, 97AZ98, 97AZ99, 97BA11, 97BA12, 97BA13, 97BA14, 97BA15, 97BA16, 97BA67, 97BA68, 97BA69, 97BA70, 97BE24, 97BE25, 97BE26, 97BE27, 97BE28, 97BE29, 97BE30, 97BE31, 97BE32, 97BE33, 97BE34, 97BE35, 97BE36, 97BE37, 97BE38, 97BE39, 97BN13, 97BN50, 97BP69, 97BP70, 97BP71, 97BR15, 97BR16, 97BR22, 97BR23, 97BR24, 97BR30, 97BR43, 97C070, 97C072, 97C075, 97C110, 97C112, 97C113, 97C118, 97C127, 97C140, 97C148, 97C166, 97C417, 97C558, 97C576, 97C632, 97C702, 97C731, 97C759, 97C770, 97C782, 97C794, 97C870, 97C917, 97D130, 97D228, 97E002, 97E010, 97E041, 97E065, 97E087, 97E103, 97E104, 97E11, 97E112, 97E113, 97E170, 97E171, 97E196, 97E197, 97E259, 97E260, 97E304, 97E305, 97E347, 97E42, 97E532, 97E564, 97E581, 97E595, 97E606, 97E611, 97E619, 97E649, 97E655, 97E66, 97E682, 97E749, 97E860, 97E88, 97E999, 97F005, 97F020, 97F030, 97F054, 97F312, 97F344, 97F952, 97M190, 97M191, 97M192, 97M193, 97M194, 97M195, 97M229, 97M230, 97M232, 97N832, 97N844, 97N848, 97N861, 97N873, 97N877, 97N879, 97N891, 97N895, 97N913, 97N917, 97N921, 97N941, 97N942, 97N954, 97Q303, 97Q763, 97Q781, 97Q782, 97R368, 97S760, 97U927, 97V321, 97V323, 97V325, 97V326, 97X113, 97X114, 97X131, 97X861, EMGF20

**Intended Use:** Fuel, Gasoline

### COMPANY IDENTIFICATION

#### Supplier:

**EXXON MOBIL CORPORATION**  
3225 GALLOWES RD.  
FAIRFAX, VA. 22037 USA

#### 24 Hour Health Emergency

609-737-4411

#### Transportation Emergency Phone

800-424-9300

#### ExxonMobil Transportation No.

281-834-3296

#### Product Technical Information

800-662-4525, 800-947-9147

#### MSDS Internet Address

<http://www.exxon.com>, <http://www.mobil.com>

## SECTION 2

## COMPOSITION / INFORMATION ON INGREDIENTS

### Reportable Hazardous Substance(s) or Complex Substance(s)

| Name          | CAS#       | Concentration* |
|---------------|------------|----------------|
| ETHYL ALCOHOL | 64-17-5    | < 11%          |
| Gasoline      | 86290-81-5 | 89 - 100%      |

### Hazardous Constituent(s) Contained in Complex Substance(s)

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| Name                                  | CAS#       | Concentration* |
|---------------------------------------|------------|----------------|
| BENZENE                               | 71-43-2    | 0.1 - 5%       |
| ETHYL BENZENE                         | 100-41-4   | 1 - 5%         |
| N-HEXANE                              | 110-54-3   | 1 - 5%         |
| NAPHTHALENE                           | 91-20-3    | <1%            |
| PSEUDOCUMENE (1,2,4-TRIMETHYLBENZENE) | 95-63-6    | 1 - 5%         |
| Toluene                               | 108-88-3   | 5 - 10%        |
| TRIMETHYL BENZENE                     | 25551-13-7 | 1 - 5%         |
| XYLENES                               | 1330-20-7  | 5 - 10%        |

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

NOTE: The concentration of the components shown above may vary substantially. In certain countries, benzene content may be limited to lower levels. Oxygenates such as tertiary-amyl-methyl ether, ethanol, di-isopropyl ether, and ethyl-tertiary-butyl ether may be present. Because of volatility considerations, gasoline vapor may have concentrations of components very different from those of liquid gasoline. The major components of gasoline vapor are: butane, isobutane, pentane, and isopentane. The reportable component percentages, shown in the composition/information on ingredients section, are based on API's evaluation of a typical gasoline mixture.

### SECTION 3 HAZARDS IDENTIFICATION

This material is considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

#### POTENTIAL PHYSICAL / CHEMICAL EFFECTS

Extremely flammable. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Material can accumulate static charges which may cause an incendiary electrical discharge.

#### POTENTIAL HEALTH EFFECTS

Irritating to skin. If swallowed, may be aspirated and cause lung damage. May be irritating to the eyes, nose, throat, and lungs. May cause central nervous system depression. High-pressure injection under skin may cause serious damage. Prolonged and repeated exposure to benzene may cause serious injury to blood forming organs and is associated with anemia and to the later development of acute myelogenous leukemia (AML).

**Target Organs:** Lung | Skin |

#### ENVIRONMENTAL HAZARDS

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

|                        |            |                 |               |
|------------------------|------------|-----------------|---------------|
| <b>NFPA Hazard ID:</b> | Health: 1  | Flammability: 3 | Reactivity: 0 |
| <b>HMIS Hazard ID:</b> | Health: 1* | Flammability: 3 | Reactivity: 0 |

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

### SECTION 4 FIRST AID MEASURES

#### Inhalation

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek

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immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

#### SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### Ingestion

Seek immediate medical attention. Do not induce vomiting.

#### NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

#### PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE

Benzene- Individuals with liver disease may be more susceptible to toxic effects.

### SECTION 5

#### FIRE FIGHTING MEASURES

##### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

##### FIRE FIGHTING

**Fire Fighting Instructions:** Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Unusual Fire Hazards:** Extremely Flammable. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

**Hazardous Combustion Products:** Smoke, Fume, Aldehydes, Sulfur Oxides, Incomplete combustion products, Oxides of carbon

##### FLAMMABILITY PROPERTIES

**Flash Point [Method]:** <-40C (-40F) [ASTM D-56]

**Flammable Limits (Approximate volume % in air):** LEL: 1.4 UEL: 7.6

**Autoignition Temperature:** >250°C (482°F)

### SECTION 6

#### ACCIDENTAL RELEASE MEASURES

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## NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

## PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for Personal Protective Equipment.

## SPILL MANAGEMENT

**Land Spill:** Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapor; but may not prevent ignition in closed spaces. Recover by pumping or with suitable absorbent.

**Water Spill:** Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Do not confine in area of spill. Advise occupants and shipping in downwind areas of fire and explosion hazard and warn them to stay clear. Allow liquid to evaporate from the surface. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

## ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7

## HANDLING AND STORAGE

### HANDLING

Avoid breathing mists or vapors. Avoid contact with skin. Use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapors may be evolved from heated or agitated material. Do not siphon by mouth. Use only with adequate ventilation. Use proper bonding and/or grounding procedures. Do not use as a cleaning solvent or other non-motor fuel uses. For use as a motor fuel only. It is dangerous and/or unlawful to put fuel into unapproved containers. Do not fill container while it is in or on a vehicle. Static electricity may ignite vapors and cause fire. Place container on ground when filling and keep nozzle in contact with container. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers or other electronic devices, etc.) in or around any fueling operation or storage area unless the devices are certified intrinsically safe by an approved national testing agency and to the safety standards required by national and/or local laws and regulations. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source).

**Static Accumulator:** This material is a static accumulator.

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## STORAGE

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be grounded and bonded. Drums must be grounded and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters.

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

| Source                                | Form | Limit / Standard      |            |          | NOTE | Source       |
|---------------------------------------|------|-----------------------|------------|----------|------|--------------|
| BENZENE                               |      | OSHA Action level     | 0.5 ppm    |          | N/A  | OSHA Sp.Reg. |
| BENZENE                               |      | STEL                  | 5 ppm      |          | N/A  | OSHA Sp.Reg. |
| BENZENE                               |      | TWA                   | 1 ppm      |          | N/A  | OSHA Sp.Reg. |
| BENZENE                               |      | STEL                  | 2.5 ppm    |          | Skin | ACGIH        |
| BENZENE                               |      | TWA                   | 0.5 ppm    |          | Skin | ACGIH        |
| ETHYL ALCOHOL                         |      | TWA                   | 1900 mg/m3 | 1000 ppm | N/A  | OSHA Z1      |
| ETHYL ALCOHOL                         |      | STEL                  | 1000 ppm   |          | N/A  | ACGIH        |
| ETHYL BENZENE                         |      | TWA                   | 435 mg/m3  | 100 ppm  | N/A  | OSHA Z1      |
| ETHYL BENZENE                         |      | STEL                  | 125 ppm    |          | N/A  | ACGIH        |
| ETHYL BENZENE                         |      | TWA                   | 100 ppm    |          | N/A  | ACGIH        |
| Gasoline                              |      | STEL                  | 200 ppm    |          | N/A  | ExxonMobil   |
| Gasoline                              |      | TWA                   | 100 ppm    |          | N/A  | ExxonMobil   |
| Gasoline                              |      | STEL                  | 500 ppm    |          | N/A  | ACGIH        |
| Gasoline                              |      | TWA                   | 300 ppm    |          | N/A  | ACGIH        |
| N-HEXANE                              |      | TWA                   | 1800 mg/m3 | 500 ppm  | N/A  | OSHA Z1      |
| N-HEXANE                              |      | TWA                   | 50 ppm     |          | Skin | ACGIH        |
| NAPHTHALENE                           |      | TWA                   | 50 mg/m3   | 10 ppm   | N/A  | OSHA Z1      |
| NAPHTHALENE                           |      | STEL                  | 15 ppm     |          | Skin | ACGIH        |
| NAPHTHALENE                           |      | TWA                   | 10 ppm     |          | Skin | ACGIH        |
| PSEUDOCUMENE (1,2,4-TRIMETHYLBENZENE) |      | TWA                   | 25 ppm     |          | N/A  | ACGIH        |
| Toluene                               |      | Ceiling               | 300 ppm    |          | N/A  | OSHA Z2      |
| Toluene                               |      | Maximum concentration | 500 ppm    |          | N/A  | OSHA Z2      |
| Toluene                               |      | TWA                   | 200 ppm    |          | N/A  | OSHA Z2      |
| Toluene                               |      | TWA                   | 20 ppm     |          | N/A  | ACGIH        |
| TRIMETHYL BENZENE                     |      | TWA                   | 25 ppm     |          | N/A  | ACGIH        |
| XYLENES                               |      | TWA                   | 435 mg/m3  | 100 ppm  | N/A  | OSHA Z1      |
| XYLENES                               |      | STEL                  | 150 ppm    |          | N/A  | ACGIH        |
| XYLENES                               |      | TWA                   | 100 ppm    |          | N/A  | ACGIH        |

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NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

## ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Use explosion-proof ventilation equipment to stay below exposure limits.

## PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional

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data.

## GENERAL INFORMATION

**Physical State:** Liquid  
**Color:** Clear (May Be Dyed)  
**Odor:** Petroleum/Solvent  
**Odor Threshold:** N/D

## IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 15 C):** 0.74  
**Density (at 15 °C):** 720 kg/m<sup>3</sup> (6.01 lbs/gal, 0.72 kg/dm<sup>3</sup>) - 758 kg/m<sup>3</sup> (6.33 lbs/gal, 0.76 kg/dm<sup>3</sup>)  
**Flash Point [Method]:** <-40C (-40F) [ ASTM D-56]  
**Flammable Limits (Approximate volume % in air):** LEL: 1.4 UEL: 7.6  
**Autoignition Temperature:** >250°C (482°F)  
**Boiling Point / Range:** > 20C (68F)  
**Vapor Density (Air = 1):** 3 at 101 kPa  
**Vapor Pressure:** > 26.6 kPa (200 mm Hg) at 20 C  
**Evaporation Rate (N-Butyl Acetate = 1):** > 10  
**pH:** N/A  
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3  
**Solubility in Water:** Negligible  
**Viscosity:** <1 cSt (1 mm<sup>2</sup>/sec) at 40 C  
**Oxidizing Properties:** See Hazards Identification Section.

## OTHER INFORMATION

**Freezing Point:** N/D  
**Melting Point:** N/A

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Avoid heat, sparks, open flames and other ignition sources.

**MATERIALS TO AVOID:** Halogens, Strong Acids, Alkalies, Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

| Route of Exposure                             | Conclusion / Remarks                                                                                                                                                           |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                             |                                                                                                                                                                                |
| Toxicity (Rat): LC50 > 5000 mg/m <sup>3</sup> | Minimally Toxic. Based on test data for structurally similar materials.                                                                                                        |
| Irritation: No end point data.                | Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Based on assessment of the components. |
| <b>Ingestion</b>                              |                                                                                                                                                                                |

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|                                      |                                                                                                               |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Toxicity (Rat): LD50 > 2000 mg/kg    | Minimally Toxic. Based on test data for structurally similar materials.                                       |
| <b>Skin</b>                          |                                                                                                               |
| Toxicity (Rabbit): LD50 > 2000 mg/kg | Minimally Toxic. Based on test data for structurally similar materials.                                       |
| Irritation: No end point data.       | Moderately irritating to skin with prolonged exposure. Based on test data for structurally similar materials. |
| <b>Eye</b>                           |                                                                                                               |
| Irritation: Data available.          | May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.      |

## CHRONIC/OTHER EFFECTS

### For the product itself:

Laboratory animal studies have shown that prolonged and repeated inhalation exposure to light hydrocarbon vapors in the same boiling range as this product can produce adverse kidney effects in male rats. However, these effects were not observed in similar studies with female rats, male and female mice, or in limited studies with other animal species. Additionally, in a number of human studies, there was no clinical evidence of such effects at normal occupational levels. In 1991, The U.S. EPA determined that the male rat kidney is not useful for assessing human risk.

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Gasoline unleaded: Caused cancer in animal tests. Chronic inhalation studies resulted in liver tumors in female mice and kidney tumors in male rats. Neither result considered significant for human health risk assessment by the United States EPA and others. Did not cause mutations In Vitro or In Vivo. Negative in inhalation developmental studies and reproductive tox studies. Inhalation of high concentrations in animals resulted in reversible central nervous system depression, but no persistent toxic effect on the nervous system. Non-sensitizing in test animals. Caused nerve damage in humans from abusive use (sniffing).

### Contains:

**BENZENE:** Caused cancer (leukemia), damage to the blood-producing system, and serious blood disorders from prolonged, high exposure based on human epidemiology studies. Caused genetic effects and effects on the immune system in laboratory animal and some human studies. Caused toxicity to the fetus in laboratory animal studies.

**ETHANOL:** Prolonged or repeated exposure to high concentrations of ethanol vapor or overexposure by ingestion may produce adverse effects to brain, kidney, liver, and reproductive organs, birth defects in offspring, and developmental toxicity in offspring.

**NAPHTHALENE:** Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

**N-HEXANE:** Prolonged and/or repeated exposures to n-Hexane can cause progressive and potentially irreversible damage to the peripheral nervous system (e.g. fingers, feet, arms, legs, etc.). Simultaneous exposure to Methyl Ethyl Ketone (MEK) or Methyl Isobutyl Ketone (MIBK) and n-Hexane can potentiate the risk of adverse effects from n-Hexane on the peripheral nervous system. n-Hexane has been shown to cause testicular damage at high doses in male rats. The relevance of this effect for humans is unknown.

**TOLUENE:** Concentrated, prolonged or deliberate inhalation may cause brain and nervous system damage. Prolonged and repeated exposure of pregnant animals (> 1500 ppm) have been reported to cause adverse fetal developmental effects.

**TRIMETHYLBENZENE:** Long-term inhalation exposure of trimethylbenzene caused effects to the blood in laboratory animals.

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ETHYLBENZENE: Caused cancer in laboratory animal studies. The relevance of these findings to humans is uncertain.

Additional information is available by request.

The following ingredients are cited on the lists below:

| Chemical Name | CAS Number | List Citations |
|---------------|------------|----------------|
| BENZENE       | 71-43-2    | 1, 3, 6        |
| ETHYL BENZENE | 100-41-4   | 5              |
| Gasoline      | 86290-81-5 | 5              |
| NAPHTHALENE   | 91-20-3    | 2, 5           |

--REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

**SECTION 12****ECOLOGICAL INFORMATION**

The information given is based on data available for the material, the components of the material, and similar materials.

**ECOTOXICITY**

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**MOBILITY**

More volatile component -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

Less volatile component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

**PERSISTENCE AND DEGRADABILITY****Biodegradation:**

Majority of components -- Expected to be inherently biodegradable

**Atmospheric Oxidation:**

More volatile component -- Expected to degrade rapidly in air

**BIOACCUMULATION POTENTIAL**

Majority of components -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

**SECTION 13****DISPOSAL CONSIDERATIONS**

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

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## DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

## REGULATORY DISPOSAL INFORMATION

RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Potential RCRA characteristics: IGNITABILITY. TCLP (BENZENE)

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

|                   |                              |
|-------------------|------------------------------|
| <b>SECTION 14</b> | <b>TRANSPORT INFORMATION</b> |
|-------------------|------------------------------|

### LAND (DOT)

**Proper Shipping Name:** Gasoline

**Hazard Class & Division:** 3

**ID Number:** 1203

**Packing Group:** II

**Marine Pollutant:** Yes

**ERG Number:** 128

**Label(s):** 3

**Transport Document Name:** UN1203, GASOLINE, 3, PG II, MARINE POLLUTANT

### LAND (TDG)

**Proper Shipping Name:** Gasoline

**Hazard Class & Division:** 3

**UN Number:** 1203

**Packing Group:** II

**Special Provisions:** 17

### SEA (IMDG)

**Proper Shipping Name:** MOTOR SPIRIT or GASOLINE or PETROL

**Hazard Class & Division:** 3

**EMS Number:** F-E, S-E

**UN Number:** 1203

**Packing Group:** II

**Marine Pollutant:** Yes

**Label(s):** 3

**Transport Document Name:** UN1203, MOTOR SPIRIT or GASOLINE or PETROL, 3, PG II, (-40°C c.c.), MARINE POLLUTANT

### AIR (IATA)

**Proper Shipping Name:** MOTOR SPIRIT or GASOLINE or PETROL

**Hazard Class & Division:** 3

**UN Number:** 1203

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**Packing Group:** II  
**Label(s) / Mark(s):** 3  
**Transport Document Name:** UN1203, GASOLINE, 3, PG II

|                   |                               |
|-------------------|-------------------------------|
| <b>SECTION 15</b> | <b>REGULATORY INFORMATION</b> |
|-------------------|-------------------------------|

**OSHA HAZARD COMMUNICATION STANDARD:** When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

**NATIONAL CHEMICAL INVENTORY LISTING:** AICS, DSL, EINECS, ENCS, KECI, PICCS, TSCA

**EPCRA:** This material contains no extremely hazardous substances.

**CERCLA:** This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Contact local authorities to determine if other reporting requirements apply.

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** Fire. Immediate Health. Delayed Health.

**SARA (313) TOXIC RELEASE INVENTORY:**

| Chemical Name                         | CAS Number | Typical Value |
|---------------------------------------|------------|---------------|
| PSEUDOCUMENE (1,2,4-TRIMETHYLBENZENE) | 95-63-6    | 1 - 5%        |
| BENZENE                               | 71-43-2    | 0.1 - 5%      |
| ETHYL BENZENE                         | 100-41-4   | 1 - 5%        |
| N-HEXANE                              | 110-54-3   | 1 - 5%        |
| NAPHTHALENE                           | 91-20-3    | <1%           |
| Toluene                               | 108-88-3   | 5 - 10%       |
| XYLENES                               | 1330-20-7  | 5 - 10%       |

The following ingredients are cited on the lists below:

| Chemical Name                         | CAS Number | List Citations                          |
|---------------------------------------|------------|-----------------------------------------|
| BENZENE                               | 71-43-2    | 1, 2, 4, 10, 11, 13, 15, 16, 17, 18, 19 |
| ETHYL ALCOHOL                         | 64-17-5    | 1, 4, 13, 17, 18, 19                    |
| ETHYL BENZENE                         | 100-41-4   | 1, 4, 10, 13, 16, 17, 18, 19            |
| Gasoline                              | 86290-81-5 | 1, 17, 18                               |
| N-HEXANE                              | 110-54-3   | 1, 4, 13, 16, 17, 18, 19                |
| NAPHTHALENE                           | 91-20-3    | 1, 4, 5, 9, 10                          |
| PSEUDOCUMENE (1,2,4-TRIMETHYLBENZENE) | 95-63-6    | 1, 13, 16, 17, 18, 19                   |
| Toluene                               | 108-88-3   | 1, 4, 11, 13, 15, 16, 17, 18, 19        |
| TRIMETHYL BENZENE                     | 25551-13-7 | 1, 13, 16, 17, 18, 19                   |
| XYLENES                               | 1330-20-7  | 1, 4, 5, 9, 13, 15, 17, 18, 19          |

--REGULATORY LISTS SEARCHED--

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|               |                  |                   |             |
|---------------|------------------|-------------------|-------------|
| 1 = ACGIH ALL | 6 = TSCA 5a2     | 11 = CA P65 REPRO | 16 = MN RTK |
| 2 = ACGIH A1  | 7 = TSCA 5e      | 12 = CA RTK       | 17 = NJ RTK |
| 3 = ACGIH A2  | 8 = TSCA 6       | 13 = IL RTK       | 18 = PA RTK |
| 4 = OSHA Z    | 9 = TSCA 12b     | 14 = LA RTK       | 19 = RI RTK |
| 5 = TSCA 4    | 10 = CA P65 CARC | 15 = MI 293       |             |

Code key: CARC=Carcinogen; REPRO=Reproductive

| SECTION 16 | OTHER INFORMATION |
|------------|-------------------|
|------------|-------------------|

N/D = Not determined, N/A = Not applicable

## THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:

Section 01: Product Code was modified.

Section 14: Proper Shipping Name was modified.

Section 15: SARA (313) TOXIC RELEASE INVENTORY - Table was modified.

Section 09: Oxidizing Properties was modified.

Section 09: Density - Header was added.

Section 09: Density kg/m3(lbs/gal) was added.

**THIS MSDS COVERS THE FOLLOWING MATERIALS:** ESSO EXTRA MIDGRADE UNLEADED | ESSO MIDGRADE UNLEADED | ESSO PREMIUM UNLEADED | ESSO REGULAR UNLEADED | ESSO SUPER PREMIUM UNLEADED | EXXON MIDGRADE UNLEADED | EXXON PREMIUM UNLEADED | EXXON REGULAR UNLEADED | Gasoline | INDOLINE GASOLINE | MIDGRADE UNLEADED | MOBIL EXTRA UNLEADED | MOBIL REGULAR UNLEADED | MOBIL SPECIAL UNLEADED | MOBIL SUPER UNLEADED | PREMIUM UNLEADED | REGULAR UNLEADED | UNLEADED GASOLINE

## PRECAUTIONARY LABEL TEXT:

**Contains:** BENZENE, Gasoline

DANGER!

## HEALTH HAZARDS

Irritating to skin. If swallowed, may be aspirated and cause lung damage. Prolonged and repeated exposure to benzene may cause serious injury to blood forming organs and is associated with anemia and to the later development of acute myelogenous leukemia (AML).

**Target Organs:** Lung | Skin |

## PHYSICAL HAZARDS

Extremely flammable. Material can accumulate static charges which may cause an incendiary electrical discharge. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited.

## PRECAUTIONS

Avoid breathing mists or vapors. Avoid contact with skin. Use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapors may be evolved from heated or agitated material. Do not siphon by mouth. Use only with adequate ventilation. Use proper bonding and/or grounding procedures.

## FIRST AID

**Inhalation:** Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

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**Eye:** Flush thoroughly with water. If irritation occurs, get medical assistance.

**Oral:** Seek immediate medical attention. Do not induce vomiting.

**Skin:** Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### **FIRE FIGHTING MEDIA**

Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

#### **SPILL/LEAK**

**Land Spill:** Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Recover by pumping or with suitable absorbent.

**Water Spill:** Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Do not confine in area of spill. Advise occupants and shipping in downwind areas of fire and explosion hazard and warn them to stay clear. Allow liquid to evaporate from the surface. Seek the advice of a specialist before using dispersants.

This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm are created by the combustion of this product.

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