Gasoline

SAFETY DATA SHEET / MATERIAL SAFETY DATA SHEET

Date of Preparation: January 23, 2015

Section 1: IDENTIFICATION

Product Identifier: Gasoline

Other Means of Identification: Regular, Premium, Mid-Grade, Subgrade, Gasohol.

SDS Number: 934

Product Codes: E10 Mid, top tier treated (13311136);
E10 Midgrade Gasohol (13311131);
E10 Prem, top tier treated (13111136);
E10 Premium Gasohol (13111131);
E10 Reg, top tier treated (13211136);
E10 Regular Gasohol (13211131);
E10 Shell Midgrade Gasohol (11321031);
E10 Shell Premium Gasohol (11121031);
E10 Shell Regular Gasohol (11221031);
Mid Unleaded (11311020);
Premium 92 Unleaded (11111020);
Subgrade 84 (11221031);
Subgrade 86 (11321031);
Subgrade 90 (11121031);
Unl Midgrade, top tier treated (11311025);
Unl Prem, top tier treated (11111025);
Unl Regular, top tier treated (11211025);
Unleaded Premium 91 (11121020);
Unleaded Regular (11211020);
Unleaded Subgrade (11221020).

Product Use: Motor Fuels.

Restrictions on Use: Not available.

Manufacturer/Supplier: U.S. OIL & REFINING CO.
3001 Marshall Ave.
Tacoma, WA 98421

Emergency Phone: U.S. OIL & REFINING CO.: (253) 383-1651
CHEMTREC: 800-424-9300
NATIONAL POISON CENTER: 1-800-222-1222

Date of Preparation of SDS: January 23, 2015

Section 2: HAZARD(S) IDENTIFICATION

CLASSIFICATION: Flammable Liquids, Category 1
Skin Irritation, Category 2
Eye Irritation, Category 2A
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1A
Toxic to Reproduction, Category 2
Gasoline
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Specific Target Organ Toxicity (Single Exposure), Category 3 - Narcotic Effects
Specific Target Organ Toxicity (Repeated Exposure), Category 1
Aspiration Hazard, Category 1

LABEL ELEMENTS
Hazard Symbol(s):

Signal Word: Danger
Hazard Statements:
- Highly flammable liquid and vapor.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause genetic defects.
- May cause cancer.
- Suspected of damaging fertility or the unborn child.
- May cause drowsiness or dizziness.
- Causes damage to organs through prolonged or repeated exposure.
- May be fatal if swallowed and enters airways.

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, and hot surfaces. – No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical, ventilating, and lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe mist, vapors, or spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves, protective clothing and eye protection.

Response:
- If swallowed: Immediately call a poison center or doctor.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Get medical advice/attention if you feel unwell.
- Do NOT induce vomiting.
- If skin irritation occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Wash contaminated clothing before reuse.
In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.


Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazard Not Otherwise Classified: No applicable information was found.

Ingredients with Unknown Acute Toxicity: None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>Common name / Synonyms</th>
<th>CAS No.</th>
<th>% wt./wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline, natural</td>
<td>Not available.</td>
<td>8006-61-9</td>
<td>100</td>
</tr>
<tr>
<td>Benzene, methyl-</td>
<td>Toluene</td>
<td>108-88-3</td>
<td>7 - 10, 10 - 20*</td>
</tr>
<tr>
<td>Benzene, dimethyl-</td>
<td>Xylene</td>
<td>1330-20-7</td>
<td>5 - 10, 10 - 20*</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>Not available.</td>
<td>110-54-3</td>
<td>1 - 5, 5 - 8*</td>
</tr>
<tr>
<td>Ethanol</td>
<td>Not available.</td>
<td>64-17-5</td>
<td>0 - 0.1, 5 - 10*</td>
</tr>
<tr>
<td>Benzene, ethyl-</td>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Benzene, 1,2,4-trimethyl-</td>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Pentane, 2,2,4-trimethyl-</td>
<td>2,2,4-Trimethylpentane</td>
<td>540-84-1</td>
<td>0.1 - 1, 1 - 3*</td>
</tr>
<tr>
<td>Benzene</td>
<td>Not available.</td>
<td>71-43-2</td>
<td>0.5 - 1, 1 - 2*</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>Not available.</td>
<td>110-82-7</td>
<td>0.1 - 1, 1 - 1.5*</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>Not available.</td>
<td>91-20-3</td>
<td>0.1 - 0.5</td>
</tr>
<tr>
<td>Benzene, (1-methylethyl)-</td>
<td>Cumene</td>
<td>98-82-8</td>
<td>0.1 - 0.5</td>
</tr>
</tbody>
</table>

* Multiple concentration ranges are listed due to production variability, and in conformance with Canadian WHMIS requirements.

### Section 4: FIRST-AID MEASURES

**Inhalation:** If inhaled: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, get medical attention/advice. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

**Acute and delayed symptoms and effects:** May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness.
Skin Contact: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Acute and delayed symptoms and effects:** Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Eye Contact: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Acute and delayed symptoms and effects:** Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion: If swallowed: Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

**Acute and delayed symptoms and effects:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Naphthalene may cause liver and kidney damage.

Note to Physicians: Symptoms may not appear immediately.

## Section 5: FIRE-FIGHTING MEASURES

**NFPA 704**

**Flammability**

- 3

**Health**

- 2

**Instability**

- 0

**SUITABLE/UNSUITABLE EXTINGUISHING MEDIA**

**Suitable Extinguishing Media:**

- Small Fire: Dry chemical, CO2, water spray or alcohol-resistant foam.
- Large Fire: Water spray, fog or alcohol-resistant foam. Move undamaged containers from fire area if it can be done safely.

**Unsuitable Extinguishing Media:**

- Do not use straight streams. CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.
SPECIFIC HAZARDS
Extremely flammable liquid and vapor. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Products of Combustion: Oxides of carbon.
Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.
Sensitivity to Static Discharge: Take precautionary measures against static discharge. This material is sensitive to static discharge.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS
Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters’ protective clothing will only provide limited protection.

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Do not touch or walk through spilled material. Use personal protection recommended in Section 8. Stay upwind and away from release.

Protective Equipment: Emergency eyewash capability should be available. Wear respirator protection as conditions warrant.

Emergency Procedures: As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. The use of explosion proof electrical equipment is recommended.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Methods for Containment: Stop leak if it can be done without risk. A vapor suppressing foam may be used to reduce vapors. Prevent spreading of material into sewers. Avoid allowing water runoff to contact spilled material.

Methods for Clean-Up: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material.

Section 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:
Do not swallow. Do not breathe mist, vapors, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. See Section 8 for information on Personal Protective Equipment.

CONDITIONS FOR SAFE STORAGE:
Store in a cool, dry, well-ventilated place. Use approved containers that are tightly closed and clearly labeled. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Protect storage containers from physical damage, sunlight, and all sources of ignition. Post area as “No Smoking”.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline        [CAS No. 8006-61-9]</td>
<td>300 ppm (TWA); 500 ppm (STEL); A3 (1990)</td>
<td>300 ppm (TWA); 500 ppm (STEL) [Vacated];</td>
</tr>
<tr>
<td>Toluene [CAS No. 108-88-3]</td>
<td>20 ppm (TWA); A4; BEI (2006)</td>
<td>200 ppm (TWA); 300 ppm (C); 500 ppm (Peak) (Maximum duration: 10 minutes.) 100 ppm (TWA); 150 ppm (STEL) [Vacated]</td>
</tr>
<tr>
<td>Xylene      [CAS No. 1330-20-7]</td>
<td>100 ppm (TWA); 150 ppm (STEL); A4; BEI (1992)</td>
<td>100 ppm (TWA), 435 mg/m³ (TWA) 150 ppm (STEL) [Vacated]</td>
</tr>
<tr>
<td>n-Hexane [CAS No. 110-54-3]</td>
<td>50 ppm (TWA); Skin, BEI (1996)</td>
<td>500 ppm (TWA), 1800 mg/m³ (TWA); Skin. 50 ppm (TWA) [Vacated]</td>
</tr>
<tr>
<td>Ethanol  [CAS No. 64-17-5]</td>
<td>1000 ppm (TWA); A3 (2008)</td>
<td>1000 ppm (TWA), 1900 mg/m³ (TWA)</td>
</tr>
<tr>
<td>Ethylbenzene [CAS No. 100-41-4]</td>
<td>20 ppm (TWA); A3; BEI (2010)</td>
<td>100 ppm (TWA), 435 mg/m³ (TWA) 125 ppm (STEL) [Vacated]</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene [CAS No. 95-63-6]</td>
<td>25 ppm (TWA); (1970)</td>
<td>No PEL established.</td>
</tr>
<tr>
<td>Chemical</td>
<td>Exposure Limits</td>
<td>Notes</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>2,2,4-Trimethylpentane</td>
<td>300 ppm (TWA);</td>
<td>No PEL established.</td>
</tr>
<tr>
<td>[CAS No. 540-84-1]</td>
<td>(1979)</td>
<td></td>
</tr>
<tr>
<td>Benzene [CAS No. 71-43-2]</td>
<td>0.5 ppm (TWA);</td>
<td>1 ppm (TWA); 5 ppm</td>
</tr>
<tr>
<td></td>
<td>2.5 ppm (STEL);</td>
<td>(STEL)</td>
</tr>
<tr>
<td></td>
<td>Skin; A1; BEI</td>
<td>(1996)</td>
</tr>
<tr>
<td></td>
<td>(1964)</td>
<td>300 ppm (TWA), 1050</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mg/m³ (TWA)</td>
</tr>
<tr>
<td>Cyclohexane [CAS No. 110-82-7]</td>
<td>100 ppm (TWA);</td>
<td>10 ppm (TWA), 50</td>
</tr>
<tr>
<td></td>
<td>(1964)</td>
<td>mg/m³ (TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 ppm (STEL) [Vacated]</td>
</tr>
<tr>
<td>Naphthalene [CAS No. 91-20-3]</td>
<td>10 ppm (TWA);</td>
<td>10 ppm (TWA), 50</td>
</tr>
<tr>
<td></td>
<td>Skin; A3</td>
<td>mg/m³ (TWA)</td>
</tr>
<tr>
<td></td>
<td>(2013)</td>
<td>15 ppm (STEL) [Vacated]</td>
</tr>
<tr>
<td>Cumene [CAS No. 98-82-8]</td>
<td>50 ppm (TWA);</td>
<td>50 ppm (TWA), 245</td>
</tr>
<tr>
<td></td>
<td>(1997)</td>
<td>mg/m³ (TWA); Skin.</td>
</tr>
</tbody>
</table>

PEL: Permissible Exposure Limit
TWA: Time-Weighted Average
STEL: Short-Term Exposure Limit
C: Ceiling

ENGINEERING CONTROLS
Use ventilation adequate to keep exposures (airborne levels of fume, vapor, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Wear safety glasses, goggles or faceshield to prevent eye and face contact. Ensure that eyewash stations are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.


Skin and Body Protection: Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled.

Respiratory Protection: If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then a NIOSH approved air-purifying respirator, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
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General Hygiene Considerations:
Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection. Emergency eyewash should be available near operations presenting a potential splash exposure. Avoid skin exposure. Promptly remove contaminated clothing, gloves, and shoes.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid.
Color: Transparent, clear to amber.
Odor Threshold: Not available.
Physical State: Liquid.
pH: Not available.
Melting Point / Freezing Point: Not available.
Initial Boiling Point: 20 °C (68 °F)
Boiling Range: 20 to 204 °C (68 to 400 °F)
Flash Point: > -43 °C (-45 °F) (ASTM D-56)
Evaporation Rate: Not available.
Flammability (solid, gas): Not applicable.
Lower Flammability Limit: Approximately 1.3 %
Upper Flammability Limit: Approximately 8.2 %
Vapor Pressure: Approximately 7 to 15 psi (48 to 103 kPa) at 100 °F (Reid Vapor Pressure)
Vapor Density: Approximately 3.5 (Air = 1)
Relative Density: 0.72 to 0.83 (Water = 1)
Solubilities: Insoluble in water.
Partition Coefficient: n-Octanol/Water: Not available.
Auto-ignition Temperature: Approximately 277 °C (530 °F)
Decomposition Temperature: Not available.
Viscosity: < 1 cSt
Percent Volatile, wt. %: 100
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VOC Content, wt. %: Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity: Stable under normal storage conditions.

Chemical Stability: Stable under normal storage conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Contact with incompatible materials. Sources of ignition. Exposure to heat.


Hazardous Decomposition Products: Oxides of carbon.

Section 11: TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE: Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

ACUTE EXPOSURE

PRODUCT TOXICITY

Oral: 2330 mg/kg, calculated
Dermal: 3000 mg/kg, calculated
Inhalation: 300000 mg/m³ (rat); 5M

COMPONENT TOXICITY

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>LD₅₀ oral</th>
<th>LD₅₀ dermal</th>
<th>LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(rat); 5M</td>
</tr>
<tr>
<td>Gasoline</td>
<td>8006-61-9</td>
<td>Not available.</td>
<td>Not available.</td>
<td>300000 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(rat); 4H</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>2600 mg/kg (rat)</td>
<td>14.1 mL/kg (rabbit)</td>
<td>49000 mg/m³</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>4300 mg/kg (rat)</td>
<td>&gt; 1700 mg/kg (rabbit)</td>
<td>5000 ppm (rat); 4H</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>25000 mg/kg (rat)</td>
<td>Not available.</td>
<td>48000 ppm (rat); 4H</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>7060 mg/kg (rat)</td>
<td>20000 mg/kg (rabbit)</td>
<td>20000 ppm (rat); 10H</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>3500 mg/kg (rat)</td>
<td>17800 µl/kg (rabbit)</td>
<td>Not available.</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>Not available.</td>
<td>Not available.</td>
<td>18000 mg/m³ (rat); 4H</td>
</tr>
<tr>
<td>2,2,4-Trimethylpentane</td>
<td>540-84-1</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Benzene</td>
<td>71-43-2</td>
<td>930 mg/kg (rat)</td>
<td>&gt; 9400 µl/kg (rabbit)</td>
<td>10000 ppm (rat); 7H</td>
</tr>
</tbody>
</table>

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**Cyclohexane**  
110-82-7  
813 mg/kg (mouse)  
180000 mg/kg (rabbit)  
Not available.

**Naphthalene**  
91-20-3  
490 mg/kg (rat)  
> 2500 mg/kg (rat)  
> 340 mg/m³ (rat); 1H

**Cumene**  
98-82-8  
1400 mg/kg (rat)  
12.3 mL/kg (rabbit)  
10000 mg/m³ (mouse); 7H


**SYMPTOMS (including delayed and immediate effects)**

**Inhalation:** May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Inhalation of Toluene may result in peculiar skin sensations (e.g. pins and needles) or numbness. Very high concentrations may cause unconsciousness and death. High vapor concentrations of Xylene are anesthetic and central nervous system depressants. Hemolytic anemia (destruction of red blood cells) is the primary health concern for humans exposed to Naphthalene for either short or long periods of time. Other effects may include nausea, profuse perspiration, vomiting, kidney damage and liver damage. Optic neuritis (inflammation of the optic nerve) has been observed. Cataracts have also occurred.

**Eye:** Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

**Skin:** Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Naphthalene may be absorbed through the skin in harmful amounts.

**Ingestion:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. Naphthalene may cause liver and kidney damage. May cause blood abnormalities, methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. Ingestion of large quantities of Naphthalene may cause severe hemolytic anemia and hemoglobinuria.

**Skin Sensitization:** Not available.

**Respiratory Sensitization:** Not available.

**Medical Conditions Aggravated By Exposure:** Exposure to Naphthalene may aggravate glucose-6-phosphate dehydrogenase deficiency.
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**CHRONIC EFFECTS** (from short and long-term exposure)


**Chronic Effects:** Hazardous by OSHA/WHMIS criteria. May cause chronic effects. Prolonged or repeated contact may dry skin and cause irritation. Reports of chronic poisoning with Benzene, Toluene, Ethylbenzene or Xylene describe anemia, decreased blood cell count and bone marrow hypoplasia. Liver and kidney damage may occur. Repeated exposure of the eyes to high concentrations of Xylenes vapor may cause reversible eye damage. Chronic inhalation exposure to xylene causes mid-frequency hearing loss in laboratory animals. Xylene reacts synergistically with n-hexane to enhance hearing loss. Immunodepressive effects have also been reported for Benzene. Chronic inhalation of n-Hexane may cause peripheral nerve disorders and central nervous system effects. Prolonged exposure to Ethanol may cause liver, kidney, and heart damage. 1,2,4-Trimethylbenzene may cause central nervous system changes, asthmatic bronchitis, and changes in the blood such as anemia or thrombocytopenia (i.e. low thrombocyte count that may affect the blood's ability to clot). This material contains Cyclohexane which is known to cause liver and kidney damage.

**Carcinogenicity:** May cause cancer. Long-term exposure to Gasoline vapors has caused cancer in laboratory animals. Animal studies with Ethanol have reported the development of tumors. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumor composed of cells of the type normally found in the bone marrow).

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>Prop 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>A3</td>
<td>Group 2B</td>
<td>Not listed</td>
<td>OSHA Carcinogen.</td>
<td>Listed.</td>
</tr>
<tr>
<td>Toluene</td>
<td>A4</td>
<td>Group 3</td>
<td>Not listed</td>
<td>Not listed.</td>
<td>Not listed.</td>
</tr>
<tr>
<td>Xylene</td>
<td>A4</td>
<td>Group 3</td>
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<td>Not listed.</td>
<td>Not listed.</td>
</tr>
<tr>
<td>Ethanol</td>
<td>A3</td>
<td>Group 1</td>
<td>Not listed</td>
<td>OSHA Carcinogen.</td>
<td>Not listed.</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>A3</td>
<td>Group 2B</td>
<td>Not listed</td>
<td>OSHA Carcinogen.</td>
<td>Listed.</td>
</tr>
<tr>
<td>Benzene</td>
<td>A1</td>
<td>Group 1</td>
<td>List 1</td>
<td>OSHA Carcinogen.</td>
<td>Listed.</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>A3</td>
<td>Group 2B</td>
<td>List 2</td>
<td>OSHA Carcinogen.</td>
<td>Listed.</td>
</tr>
<tr>
<td>Cumene</td>
<td>Not listed</td>
<td>Group 2B</td>
<td>Not listed</td>
<td>OSHA Carcinogen.</td>
<td>Listed.</td>
</tr>
</tbody>
</table>

**Mutagenicity:** May cause genetic defects. Laboratory experiments with Ethanol have resulted in mutagenic effects.

**Reproductive Effects:** Suspected of damaging fertility or the unborn child. Ethanol may cause reproductive effects.

**Developmental Effects**

| Teratogenicity: | Not available. |

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**Embryotoxicity:** Possible risk of harm to the unborn child. Exposure to Toluene may affect the developing fetus. Benzene and Xylene have caused adverse fetal effects in laboratory animals. Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

**Toxicologically Synergistic Materials:** Xylene reacts synergistically with n-hexane to enhance hearing loss.

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**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:** This product is potentially toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

**Persistence / Degradability:** Primary components of this product are considered biodegradable in aerobic conditions.

**Bioaccumulation / Accumulation:** On release to the environment the lighter, product components will readily evaporate, but the remainder may become dispersed in the water column or adsorbed to soil or sediment.

**Mobility in Environment:** Not available.

**Other Adverse Effects:** Not available.

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**Section 13: DISPOSAL CONSIDERATIONS**

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

---

**Section 14: TRANSPORT INFORMATION**

<table>
<thead>
<tr>
<th>REGULATORY INFORMATION</th>
<th>ID NUMBER</th>
<th>EMERGENCY RESPONSE GUIDEBOOK</th>
<th>PROPER SHIPPING NAME</th>
<th>CLASS</th>
<th>PACKING GROUP</th>
<th>PLACARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>UN1203</td>
<td>Guide 128</td>
<td>GASOLINE</td>
<td>3</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>TDG Classification</td>
<td>UN1203</td>
<td>Guide 128</td>
<td>GASOLINE</td>
<td>3</td>
<td>II</td>
<td><img src="image" alt="Flammable Placard" /></td>
</tr>
</tbody>
</table>
CHEMICAL INVENTORIES

US (TSCA)
The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)
The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

FEDERAL REGULATIONS

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification:
Class B2 - Flammable Liquids.
Class D2A - Carcinogenicity.
Class D2A - Embryotoxicity.
Class D2A - Mutagenicity.
Class D2A - Chronic toxic effects.
Class D2B - Skin irritant.
Class D2B - Eye irritant.

Hazard Symbols:

United States
This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

<table>
<thead>
<tr>
<th>Component</th>
<th>Section 302 (EHS)</th>
<th>Section 304 EHS</th>
<th>CERCLA RQ (lbs.)</th>
<th>Section 313</th>
<th>RCRA CODE</th>
<th>CAA 112( r ) TQ (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
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<td>1000</td>
<td>313</td>
<td>U220</td>
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<tr>
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<td>Not listed.</td>
<td>313</td>
<td>Not listed.</td>
<td>Not listed.</td>
</tr>
</tbody>
</table>
## Gasoline

**SAFETY DATA SHEET / MATERIAL SAFETY DATA SHEET**

**Date of Preparation:** January 23, 2015

<table>
<thead>
<tr>
<th>Component</th>
<th>Type of Toxicity</th>
<th><strong>ACUTE HEALTH</strong></th>
<th><strong>CHRONIC HEALTH</strong></th>
<th><strong>FIRE</strong></th>
<th><strong>SUDDEN RELEASE OF PRESSURE</strong></th>
<th><strong>REACTIVE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2,4-Trimethylpentane</td>
<td></td>
<td>Not listed.</td>
<td>Not listed.</td>
<td>1000</td>
<td>Not listed.</td>
<td>Not listed.</td>
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<tr>
<td>Benzene</td>
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<td>Not listed.</td>
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<td>313</td>
<td>U019</td>
</tr>
<tr>
<td>Cyclohexane</td>
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<td>U056</td>
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<tr>
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<td>313</td>
<td>U165</td>
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<td>Cumene</td>
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<td>Not listed.</td>
<td>5000</td>
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<td>U055</td>
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</table>

**SARA SECTION 311/312 - EPA HAZARD CATEGORIES**

<table>
<thead>
<tr>
<th>Component</th>
<th>Type of Toxicity</th>
<th>State Regulations</th>
<th>California Prop 65:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td></td>
<td></td>
<td>WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.</td>
</tr>
<tr>
<td>Toluene</td>
<td></td>
<td></td>
<td>cancer</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td></td>
<td></td>
<td>developmental</td>
</tr>
<tr>
<td>Benzene</td>
<td></td>
<td></td>
<td>cancer; developmental, male</td>
</tr>
<tr>
<td>Naphthalene</td>
<td></td>
<td></td>
<td>cancer</td>
</tr>
<tr>
<td>Cumene</td>
<td></td>
<td></td>
<td>cancer</td>
</tr>
</tbody>
</table>

**Section 16: OTHER INFORMATION**

**Disclaimer:**
The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use.

**Date of Preparation of SDS:** January 23, 2015

**SDS Expiry Date (Canada):** January 22, 2018

**Version:** 1.3

**GHS SDS Prepared by:** Deerfoot Consulting Inc.

**Phone:** (403) 720-3700