I. PRODUCT IDENTIFICATION

PRODUCT: Gasoline (87 Octane), All Grades

CHEMICAL NAME: Gasoline, Petrol

This MSDS applies to all grades of non-oxygenated (no ethanol added) gasoline supplied by Continental Refining Company.

a.) 87 Octane Unleaded Gasoline
b.) 89 Octane Unleaded Gasoline
c.) 91 Octane Unleaded Gasoline

CHEMICAL FAMILY: Petroleum Hydrocarbon
FORMULA: C3 - C12
CAS #: 86290-81-5

NATIONAL FIRE PROTECTION ASSOCIATION RATING CODE: 3
HEALTH CODE: 1
FIRE CODE: 3
REACTIVITY CODE: 0

II. HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>%</th>
<th>OSHA LIMIT</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline (CAS # 86290-81-5)</td>
<td>100</td>
<td>TWA - 500 ppm</td>
<td>TWA - 300 ppm STEL - 500 ppm</td>
</tr>
<tr>
<td>Benzene (CAS # 71-43-2)</td>
<td>1.0 - 2.0</td>
<td>TWA - 0.5 ppm Ceiling - 1 ppm</td>
<td>TWA - 0.1 ppm STEL - 5 ppm</td>
</tr>
<tr>
<td>Cumene (CAS # 98-82-8)</td>
<td>0 - 2</td>
<td>TWA - 50 ppm</td>
<td>TWA - 50 ppm</td>
</tr>
<tr>
<td>EthylBenzene (CAS # 100-41-4)</td>
<td>1 - 2</td>
<td>TWA -100 ppm</td>
<td>TWA - 100 ppm STEL - 125 ppm</td>
</tr>
<tr>
<td>Pseudocumene (CAS # 95-63-6)</td>
<td>0 – 3</td>
<td>TWA - 25 ppm</td>
<td>TWA - 25 ppm</td>
</tr>
<tr>
<td>Toluene (CAS # 108-88-3)</td>
<td>5 – 15</td>
<td>TWA - 200 ppm Ceiling - 300 ppm</td>
<td>TWA - 50 ppm STEL - 150 ppm</td>
</tr>
<tr>
<td>Xylene (CAS # 1330-20-7)</td>
<td>4 - 10</td>
<td>TWA - 100 ppm</td>
<td>TWA - 100 ppm STEL - 150ppm</td>
</tr>
</tbody>
</table>
### III. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>78 - 430 °F</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>325 - 525 mmHg @ 68 °F</td>
</tr>
<tr>
<td>Evaporation (Ethyl Ether = 1)</td>
<td>Estimated 1.5 Times Slower</td>
</tr>
<tr>
<td>Volatile by Volume %</td>
<td>100</td>
</tr>
<tr>
<td>Average Molar Mass</td>
<td>Approximately 100</td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow Liquid</td>
</tr>
<tr>
<td>Odor and Threshold</td>
<td>Gasoline 10ppm</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Density of Vapor (Air = 1)</td>
<td>3 – 4</td>
</tr>
<tr>
<td>Specific Gravity (Water = 1)</td>
<td>0.70 - 0.73</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility (g/100g Water @ 20OC)</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

### IV. FIRE PROTECTION INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point / Method</td>
<td>Room Temperature / PMCC (ASTM D-93)</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>536 °F or Higher</td>
</tr>
<tr>
<td>Flammable Limits (% Volume in Air)</td>
<td>LOWER 1.4</td>
</tr>
<tr>
<td></td>
<td>UPPER 7.6</td>
</tr>
</tbody>
</table>

**EXTINGUISHING MEDIA AND FIREFIGHTING PROCEDURES**

Carbon dioxide, dry chemical, or foam. Water stream may spread fire, use water spray only to cool containers exposed to fire. If leak or spill has not ignited, use water spray to disperse the vapors and flush spills away from sources of potential ignition. Do not enter enclosed or confined spaces without proper protective equipment including a full face self-contained breathing apparatus in the positive pressure demand mode when fighting fires.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Products of combustion may contain carbon monoxide, carbon dioxide and other toxic materials.

**FIRE AND EXPLOSION HAZARDS**

Avoid undue exposure to air. Avoid heat, sparks and flame. Can form flammable mixtures with air and flash at room temperature. Explosion hazard in fire situation. Vapor heavier than air and may travel considerable distance to a source of ignition and flash back.

**INCOMPATABILITY WITH OTHER MATERIALS**

Incompatible or can react with strong oxidizers.

**HAZARDOUS POLYMERIZATION**

<table>
<thead>
<tr>
<th></th>
<th>WILL NOT OCCUR</th>
<th>WILL OCCUR</th>
<th>CHEMICAL STABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td>X :STABLE</td>
</tr>
</tbody>
</table>

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V. HEALTH EFFECTS

INHALATION
Medical conditions aggravated by exposure: kidney, liver or blood disorders.
Acute effects: Possible effects include headache, nasal and respiratory irritation,
nausea, dizziness, euphoria, breathlessness, drowsiness, fatigue, hearing loss,
pneumonitis, pulmonary edema, cardiac irregularities, central nervous system
depression, convulsions and loss of consciousness.
Chronic effects: Possible effects include kidney, liver and blood disorders,
including anemia and leukemia. Laboratory animals exposed for a long duration
have been shown to develop kidney and liver tumors.

EYE CONTACT
Acute: Irritation

SKIN CONTACT
Acute: Possible narcosis.
Chronic: Irritation, dermatitis.

INGESTION
Acute: Possible effects include headache, nasal and respiratory irritation
nausea, dizziness, drowsiness, euphoria, breathlessness, fatigue, pneumonitis,
pulmonary edema, cardiac irregularities central nervous system depression,
convulsions and loss of consciousness. Aspiration hazard if ingested.

REPORTED AS POTENTIAL CARCINOGEN OR CARCINOGEN

INHALATION
Move exposed person to fresh air. If breathing has stopped, perform
artificial respiration. If breathing is difficult give oxygen. Get medical
attention as soon as possible.

EYE CONTACT
Immediately flush eyes with water for a minimum of 15 minutes,
occasionally lifting the lower and upper lids.
Get medical attention promptly.

SKIN CONTACT
If clothing soaked, immediately remove clothing and wash skin with soap
and water. Launder clothing before wearing. If any adverse reaction
occurs get medical attention promptly.

INGESTION
DO NOT INDUCE VOMITING. Immediately give 2 glasses of water.
Never give anything by mouth to an unconscious person. Get medical
help as soon as possible.

Note to Physicians: Activated charcoal mixture may be beneficial.
Suspend 50g activated charcoal in 400mL water and mix well. Administer
5mL/kg or 350mL for an average adult.
VII. EMPLOYEE PROTECTION

RESPIRATORY PROTECTION
- Up to 10ppm benzene/1000ppm gasoline - Half-mask organic respirator.
- Up to 50ppm benzene/5000ppm gasoline - Full-face organic vapor respirator or full-face respirator supplied with air.
- Greater than 50ppm benzene/5000ppm gasoline, firefighting or unknown concentration - Self-contained breathing apparatus with positive pressure.

PROTECTIVE CLOTHING
- EYES - Chemical goggles or face shield.
- SKIN - Gloves: Nitrile, neoprene or other material resistant to gasoline.

VENTILATION
- Use in well-ventilated area in order to keep air concentration below 300ppm gasoline and 0.10ppm benzene. Request assistance of safety and industrial hygiene personnel to determine air concentrations.

VIII. TRANSPORTATION AND STORAGE INFORMATION

<table>
<thead>
<tr>
<th>DOT HAZARDOUS MATERIAL</th>
<th>DOT HAZARD CLASS # 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>X: YES</td>
<td>NO</td>
</tr>
<tr>
<td>DOT SHIPPING NAME AND NO.: GASOLINE</td>
<td>UN1203</td>
</tr>
<tr>
<td>DOT LABEL(S): FLAMMABLE LIQUID</td>
<td></td>
</tr>
</tbody>
</table>

STORAGE
- Do not store near flame, heat, sparks, or strong oxidizers.
- Storage area should be well ventilated.
- Store as OSHA Class IB Flammable Liquid.

IX. ENVIRONMENTAL PROTECTION INFORMATION

SPILLS
- Notify emergency response personnel. Evacuate area and remove ignition sources.
- Build dike to contain flow. Remove free liquid, do not flush to sewer or open water.
- Pick up with inert absorbent and place in closed container for disposal. If flash point of residue is under 140OF utilize hazardous waste manifest and permitted hazardous waste disposal site. If flash point is above 140OF utilize permitted industrial waste disposal site.

<table>
<thead>
<tr>
<th>EPA HAZARDOUS WASTE</th>
<th>X: Yes : No</th>
<th>EPA WASTE CODE NO.: D 001 and D 018</th>
</tr>
</thead>
<tbody>
<tr>
<td>WASTE CHARACTERISTIC: Ignitable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WASTE DISPOSAL
- Utilize licensed waste disposal company. Consider incineration or recycling if feasible. Based on flash point, utilize permitted hazardous waste disposal site and manifest or permitted industrial waste disposal site.

DISCLAIMER
The information and recommendations contained in this publication have been compiled from sources believed reliable and to represent the best current opinion on the subject at the time of publication. Since we cannot anticipate or control the many different conditions under which this information or our product may be used, we make no guarantee that the recommendations will be adequate for all individuals or situations. Each user of the product described herein should determine the suitability of the described product for his or her particular purpose and should comply with all federal and state rules and regulations concerning the described product.

MANAGER'S SIGNATURE
Robert Hughes

DATE: August, 2012

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