SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : GASOLINE, UNLEADED

Synonyms : Regular, Unleaded Gasoline (US Grade), Mid-Grade, Plus,

Product code : SAMPLE CODE: 12345678

Manufacturer or supplier's details
Gas Company Tec
P.O. Box 1234, 5th Avenue
Toronto Ontario A1A 1A1
Canada

Emergency telephone number
Gas Energy: +1 555-123-4567;
Poison Control Centre: Consult local telephone directory for emergency number(s).

Recommended use of the chemical and restrictions on use
Recommended use : Unleaded gasoline is used in spark ignition engines including motor vehicles, inboard and outboard boat engines, small engines such as chain saws and lawn mowers, and recreational vehicles.

Prepared by : Chem Safety: +1 555-123-4567

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | Clear liquid. |
| Colour     | Clear to slightly yellow or green, undyed liquid. May be dyed red for taxation purposes. |
| Odour      | Gasoline     |

GHS Classification

| Flammable liquids : Category 1 |
| Skin irritation    : Category 2 |
| Germ cell mutagenicity : Category 1B |
Carcinogenicity : Category 1A
Reproductive toxicity : Category 2
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure : Category 1
Aspiration hazard : Category 1

GHS Label element
Hazard pictograms :

Signal word : Danger
Hazard statements : Extremely flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness or dizziness.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.

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/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.
Wear protective gloves/ eye protection/ face protection. P281 Use personal protective equipment as required. Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a
POISON CENTER or doctor/physician if you feel unwell. IF exposed or concerned: Get medical advice/attention.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

**Disposal:**
Dispose of contents/container to an approved waste disposal plant.

**Potential Health Effects**

**Primary Routes of Entry**
- Eye contact
- Ingestion
- Inhalation
- Skin contact

**Target Organs**
- Blood
- Immune system

**Inhalation**
Inhalation may cause central nervous system effects. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

**Skin**
May irritate skin.

**Eyes**
May irritate eyes.

**Ingestion**
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Aspiration hazard if swallowed - can enter lungs and cause damage.

**Chronic Exposure**
Chronic exposure to benzene may result in increased risk of leukemia and other blood disorders.

**Aggravated Medical Condition**
None known.

**Carcinogenicity:**

**IARC**
Group 1: Carcinogenic to humans

Benzene 71-43-2

**ACGIH**
Confirmed human carcinogen

Benzene 71-43-2
Confirmed animal carcinogen with unknown relevance to humans

- **Ethanol**: 64-17-5
- **Gasoline, natural**: 8006-61-9

### OSHA
OSHA specifically regulated carcinogen

- **Benzene**: 71-43-2

### NTP
Known to be human carcinogen

- **Benzene**: 71-43-2

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Pure substance/mixture**: Mixture

**Hazardous components**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>gasoline, natural</td>
<td>1234</td>
<td>95 - 100 %</td>
</tr>
<tr>
<td>toluene</td>
<td>1234</td>
<td>1 - 40 %</td>
</tr>
<tr>
<td>benzene</td>
<td>1234</td>
<td>0.5 - 1.5 %</td>
</tr>
<tr>
<td>ethanol</td>
<td>1234</td>
<td>0.1 - 0.3 %</td>
</tr>
</tbody>
</table>

### SECTION 4. FIRST AID MEASURES

**If inhaled**: Artificial respiration and/or oxygen may be necessary. Move to fresh air. Seek medical advice.

**In case of skin contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.

**In case of eye contact**: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**If swallowed**: Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.
Seek medical advice.

Most important symptoms and effects, both acute and delayed:

First aider needs to protect himself.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
- Dry chemical
- Carbon dioxide (CO2)
- Water fog
- Foam

Unsuitable extinguishing media:
- Do NOT use water jet.

Specific hazards during firefighting:
- Cool closed containers exposed to fire with water spray.

Hazardous combustion products:
- Carbon oxides (CO, CO2), nitrogen oxides (NOx), polynuclear aromatic hydrocarbons, phenols, aldehydes, ketones, smoke and irritating vapours as products of incomplete combustion.

Further information:
- Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.
- Ensure adequate ventilation.
- Evacuate personnel to safe areas.
- Material can create slippery conditions.

Environmental precautions:
- If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Prevent further leakage or spillage if safe to do so.
- Remove all sources of ignition.
- Soak up with inert absorbent material.
- Non-sparking tools should be used.
- Ensure adequate ventilation.
- Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Use only with adequate ventilation.
- In case of insufficient ventilation, wear suitable respiratory equipment.
- Avoid spark promoters. Ground/bond container and
equipment. These alone may be insufficient to remove static electricity. Avoid contact with skin, eyes and clothing. Do not ingest. Keep away from heat and sources of ignition. Keep container closed when not in use.

Conditions for safe storage: Store in original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. To maintain product quality, do not store in heat or direct sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>1234</td>
<td>TWA 20 ppm</td>
<td></td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 100 ppm 375 mg/m³</td>
<td></td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST 150 ppm 560 mg/m³</td>
<td></td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 200 ppm</td>
<td></td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CEIL 300 ppm</td>
<td></td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peak 500 ppm</td>
<td></td>
<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 100 ppm 375 mg/m³</td>
<td></td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL 150 ppm 560 mg/m³</td>
<td></td>
<td>OSHA P0</td>
</tr>
<tr>
<td>Benzene</td>
<td>1234</td>
<td>TWA 0.5 ppm</td>
<td></td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL 2.5 ppm</td>
<td></td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 0.1 ppm</td>
<td></td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST 1 ppm</td>
<td></td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 10 ppm</td>
<td></td>
<td>OSHA Z-2</td>
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<tr>
<td></td>
<td></td>
<td>CEIL 25 ppm</td>
<td></td>
<td>OSHA Z-2</td>
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<td></td>
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<td>Peak 50 ppm</td>
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<td>OSHA Z-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL 1 ppm</td>
<td></td>
<td>OSHA CARC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL 5 ppm</td>
<td></td>
<td>OSHA CARC</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1234</td>
<td>TWA 1,000 ppm 1,900 mg/m³</td>
<td></td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 1,000 ppm 1,900 mg/m³</td>
<td></td>
<td>OSHA Z-1</td>
</tr>
</tbody>
</table>
Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>1234</td>
<td>Toluene</td>
<td>In blood</td>
<td>Prior to last shift of workweek</td>
<td>0.02 mg/l</td>
<td>ACGIH BEI</td>
</tr>
<tr>
<td>Toluene</td>
<td></td>
<td>Toluene</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>0.03 mg/l</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>

Engineering measures

Use only in well-ventilated areas. Ensure that eyewash station and safety shower are proximal to the work-station location.

Personal protective equipment

Respiratory protection

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type

A NIOSH-approved air-purifying respirator with an organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection

Material: polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.

Remarks

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection: Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Protective measures: Wash contaminated clothing before re-use.

Hygiene measures: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid.

Colour: Clear to slightly yellow or green, undyed liquid. May be dyed red for taxation purposes.

Odour: Gasoline

Odour Threshold: No data available

pH: No data available

Pour point: No data available

Boiling point/boiling range: 25 - 225 °C (77 - 437 °F)


Auto-Ignition Temperature: 257 °C (495 °F)

Evaporation rate: No data available

Flammability: Extremely flammable in presence of open flames, sparks, shocks, and heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. Rapid escape of vapour may generate static charge causing ignition. May accumulate in confined spaces.

Upper explosion limit: 7.6 %(V)

Lower explosion limit: 1.3 %(V)

Vapour pressure: < 802.5 mmHg (20 °C / 68 °F)

Relative vapour density: 3

Relative density: 0.685 - 0.8

Solubility(ies):
Water solubility: insoluble
Partition coefficient: n-octanol/water: No data available

Viscosity: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Containers may explode in heat of fire. Vapours may form explosive mixtures with air.

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions: Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid: Extremes of temperature and direct sunlight.
Incompatible materials: Reactive with oxidising agents, acids and interhalogens.
Hazardous decomposition products: May release COx, NOx, phenols, polycyclic aromatic hydrocarbons, aldehydes, ketones, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Product:

Acute oral toxicity: Remarks: No data available
Acute inhalation toxicity: Remarks: No data available
Acute dermal toxicity: Remarks: No data available

Components:
toluene:

Acute oral toxicity: LD50 (Rat): 5,580 mg/kg
Acute inhalation toxicity: LC50 (Rat): 7585 ppm
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity: LD50 (Rabbit): 12,125 mg/kg

benzene:
Acute oral toxicity
LD50 (Rat): 2,990 mg/kg

Acute inhalation toxicity
LC50 (Rat): 13700 ppm
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity
LD50 (Rabbit): > 8,240 mg/kg

ethanol:
Acute oral toxicity
LD50 (Rat): 7,060 mg/kg

Acute inhalation toxicity
LC50 (Rat): > 32380 ppm
Exposure time: 4 h
Test atmosphere: vapour

Skin corrosion/irritation

Product:
Remarks: No data available

Components:
toluene:
Result: Moderate skin irritant

benzene:
Result: Moderate skin irritant

ethanol:
Result: Skin irritation

Serious eye damage/eye irritation

Product:
Remarks: No data available

Components:
toluene:
Result: Mild eye irritation

benzene:
Result: Moderate eye irritation

ethanol:
Result: Eye irritation

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
No data available
Reproductive toxicity
No data available

STOT - single exposure
No data available

STOT - repeated exposure
No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

**Product:**
- Toxicity to fish : Remarks: No data available
- Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available
- Toxicity to algae : Remarks: No data available
- Toxicity to bacteria : Remarks: No data available

Persistence and degradability

**Product:**
- Biodegradability : Remarks: No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : The product should not be allowed to enter drains, water courses or the soil. Offer surplus and non-recyclable solutions to a licensed disposal company. Waste must be classified and labelled prior to recycling or disposal. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.
SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA-DGR
UN/ID No. : 1203
Proper shipping name : Gasoline
Class : 3
Packing group : II
Labels : 3
Packing instruction (cargo aircraft) : 364

IMDG-Code
UN number : 1203
Proper shipping name : GASOLINE
Class : 3
Packing group : II
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

49 CFR
UN/ID/NA number : 1203
Proper shipping name : Gasoline
Class : 3
Packing group : II
Labels : 3
ERG Code : 128
Marine pollutant : no

Special precautions for user
Not applicable

SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:

DSL On the inventory, or in compliance with the inventory
TSCA All chemical substances in this product are either listed on the
       TSCA Inventory or are in compliance with a TSCA Inventory
       exemption.
EINECS On the inventory, or in compliance with the inventory
SECTION 16. OTHER INFORMATION

Further information

NFPA:

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Health</th>
<th>Instability</th>
<th>Special hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS III:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2*</td>
<td>3</td>
<td>0</td>
<td>H</td>
</tr>
</tbody>
</table>

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

For Copy of (M)SDS:
- Internet: www.company.com
- Canada-wide: telephone: 1-800-555-1234; fax: 1-800-555-1234
- For Product Safety Information: 1 555-123-4567

Prepared by:
- Product Safety: +1 555-123-4567

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