

SAFETY DATA SHEET



Section 1. Identification

Product name BP Unleaded Gasolines
SDS # 12631
Code 12631

Relevant identified uses of the substance or mixture and uses advised against

Product use USE AS MOTOR FUEL ONLY.

Supplier BP Products North America Inc.
30 South Wacker Drive
Chicago, IL 60606
USA

EMERGENCY HEALTH INFORMATION: 1 (800) 447-8735
Outside the US: +1 703-527-3887 (CHEMTREC)

EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

Section 2. Hazards identification

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

Classification of the substance or mixture FLAMMABLE LIQUIDS - Category 1
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
GERM CELL MUTAGENICITY - Category 1
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
ASPIRATION HAZARD - Category 1

GHS label elements
Hazard pictograms



Signal word Danger
Hazard statements Extremely flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.

Precautionary statements

Section 2. Hazards identification

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

Response

IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. 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 attention.

Storage

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

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and receiving equipment. These alone may be insufficient to remove static electricity.

Hazards not otherwise classified

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire or explosion.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

| Ingredient name | CAS number | % |
|------------------------|------------|----------|
| Gasoline | Mixture | 85 - 100 |
| Ethanol | 64-17-5 | 0 - 15 |
| Contains: | | |
| Benzene | 71-43-2 | 0 - 3.8 |
| Cyclohexane | 110-82-7 | 0 - 1 |
| Ethylbenzene | 100-41-4 | 0 - 2 |
| Toluene | 108-88-3 | 4 - 11 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0 - 3 |
| xylene | 1330-20-7 | 4 - 11 |
| Naphthalene | 91-20-3 | 0 - 0.5 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Clean shoes thoroughly before reuse. Get medical attention.

Inhalation

If inhaled, remove to fresh air. Get medical attention. If exposure to vapor, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.

Section 4. First aid measures

| | |
|-----------------------------------|---|
| Ingestion | Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

| | |
|----------------------------|---|
| Notes to physician | Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias. |
| Specific treatments | No specific treatment. |

Section 5. Fire-fighting measures

Extinguishing media

| | |
|---------------------------------------|---|
| Suitable extinguishing media | In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray. |
| Unsuitable extinguishing media | Do not use water jet. The use of a water jet may cause the fire to spread by splashing the burning product. |

Specific hazards arising from the chemical

Extremely flammable liquid and vapor. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Vapors can form explosive mixtures with air. Vapors are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Liquid will float and may reignite on surface of water.

Hazardous combustion products

Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources. Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained positive pressure breathing apparatus (SCBA).

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Liquid leaks generate large volumes of flammable vapor, heavier than air, which may travel to remote sources of ignition (eg. along drainage systems). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other contaminated materials in suitable tanks or containers for recycle, recovery or safe disposal.

Methods and materials for containment and cleaning up

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilled material and runoff with soil and surface waterways. Handling operations that can promote accumulation of

Section 7. Handling and storage

static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Restrict flow velocity according to API 2003 (2008), NFPA 77 (2007), and Laurence Britton, "Avoiding Static Ignition Hazards in Chemical Operations". To reduce potential for static discharge, ensure that all equipment is properly grounded and bonded and meets appropriate electrical classification requirements.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Light hydrocarbon vapors can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapor mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurized fuel pipes, the vapor or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapor concentrations of less than 1% of the lower flammability limit and an oxygen concentration of at least 20% volume.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| Gasoline | ACGIH TLV (United States). TWA: 300 ppm 8 hours. Issued/Revised: 5/1996 TWA: 890 mg/m ³ 8 hours. Issued/Revised: 5/1996 STEL: 500 ppm 15 minutes. Issued/Revised: 5/1996 STEL: 1480 mg/m ³ 15 minutes. Issued/Revised: 5/1996 |
| Ethanol | ACGIH TLV (United States). STEL: 1000 ppm 15 minutes. Issued/Revised: 11/2008 |

Section 8. Exposure controls/personal protection

| | |
|------------------------|---|
| Toluene | <p>OSHA PEL (United States). TWA: 1900 mg/m³ 8 hours. Issued/Revised: 6/1993 TWA: 1000 ppm 8 hours. Issued/Revised: 6/1993</p> <p>OSHA PEL Z2 (United States). AMP: 500 ppm 10 minutes. Issued/Revised: 6/1993 CEIL: 300 ppm Issued/Revised: 6/1993 TWA: 200 ppm 8 hours. Issued/Revised: 6/1993</p> <p>ACGIH TLV (United States). Ototoxicant. TWA: 20 ppm 8 hours. Issued/Revised: 11/2006</p> |
| xylene | <p>ACGIH TLV (United States). STEL: 651 mg/m³ 15 minutes. Issued/Revised: 5/1996 STEL: 150 ppm 15 minutes. Issued/Revised: 5/1996 TWA: 434 mg/m³ 8 hours. Issued/Revised: 5/1996 TWA: 100 ppm 8 hours. Issued/Revised: 5/1996</p> <p>OSHA PEL (United States). TWA: 435 mg/m³ 8 hours. Issued/Revised: 6/1993 TWA: 100 ppm 8 hours. Issued/Revised: 6/1993</p> |
| Benzene | <p>ACGIH TLV (United States). Absorbed through skin. STEL: 8 mg/m³ 15 minutes. Issued/Revised: 5/1997 STEL: 2.5 ppm 15 minutes. Issued/Revised: 5/1997 TWA: 1.6 mg/m³ 8 hours. Issued/Revised: 5/1997 TWA: 0.5 ppm 8 hours. Issued/Revised: 5/1997</p> <p>OSHA PEL (United States). STEL: 5 ppm 15 minutes. Issued/Revised: 6/1993 TWA: 1 ppm 8 hours. Issued/Revised: 6/1993</p> <p>OSHA PEL Z2 (United States). AMP: 50 ppm 10 minutes. Issued/Revised: 6/1993 CEIL: 25 ppm Issued/Revised: 6/1993 TWA: 10 ppm 8 hours. Issued/Revised: 6/1993</p> |
| 1,2,4-Trimethylbenzene | <p>ACGIH TLV (United States). TWA: 123 mg/m³ 8 hours. Issued/Revised: 9/1994 TWA: 25 ppm 8 hours. Issued/Revised: 9/1994</p> |
| Ethylbenzene | <p>ACGIH TLV (United States). TWA: 20 ppm 8 hours. Issued/Revised: 12/2010</p> <p>OSHA PEL (United States). TWA: 435 mg/m³ 8 hours. Issued/Revised: 6/1993</p> |

Section 8. Exposure controls/personal protection

| | |
|-------------|---|
| cyclohexane | <p>TWA: 100 ppm 8 hours. Issued/Revised: 6/1993</p> <p>ACGIH TLV (United States). TWA: 100 ppm 8 hours. Issued/Revised: 1/2002</p> <p>OSHA PEL (United States). TWA: 1050 mg/m³ 8 hours. Issued/Revised: 6/1993</p> <p>TWA: 300 ppm 8 hours. Issued/Revised: 6/1993</p> |
| naphthalene | <p>ACGIH TLV (United States). Absorbed through skin. TWA: 52 mg/m³ 8 hours. Issued/Revised: 5/1996</p> <p>TWA: 10 ppm 8 hours. Issued/Revised: 5/1996</p> <p>OSHA PEL (United States). TWA: 50 mg/m³ 8 hours. Issued/Revised: 6/1993</p> <p>TWA: 10 ppm 8 hours. Issued/Revised: 6/1993</p> |

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Chemical splash goggles.

Skin protection

Hand protection

Wear chemical resistant gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Recommended: Gloves made from fluoroelastomer resistant to hydrocarbons and a wide range of chemicals.

Section 8. Exposure controls/personal protection

Body protection

Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Wear suitable protective clothing.

Footwear highly resistant to chemicals.

When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.

When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.

When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required. Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use only with adequate ventilation. Do not breathe vapor or mist. If ventilation is inadequate, use a NIOSH-certified respirator with an organic vapor cartridge and P95 particulate filter.

If operating conditions cause high vapor concentrations or the TLV is exceeded, use NIOSH-certified, supplied-air respirator.

Use with adequate ventilation.

If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

| | |
|---|---|
| Physical state | Clear, Liquid. |
| Color | Colorless to light yellow. |
| Odor | Gasoline |
| Odor threshold | 0.025 ppm (Based on Gasoline) |
| pH | Not applicable. Based on Solubility in water (Very slightly soluble in water) |
| Melting point/freezing point | Not available. |
| Boiling point, initial boiling point, and boiling range | 26.67 to 221.1°C (80 to 430°F) |
| Flash point | Closed cup: -42.778°C (-45°F) |
| Evaporation rate | Not available. |
| Flammability | Not applicable. Based on - Physical state |
| Lower and upper explosion limit/flammability limit | Lower: 1.3% Upper: 7.6% (Estimated.) |
| Vapor pressure | 48.3 to 103.4 kPa (361.97 to 775.66 mm Hg) [37.8°C (100°F)] |

Section 9. Physical and chemical properties

| Ingredient name | Vapor Pressure at 20°C | | | Vapor pressure at 50°C | | |
|-----------------|------------------------|------|--------|------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| Ethanol | 42.95 | 5.7 | | | | |
| Toluene | 23.17 | 3.1 | | | | |
| Benzene | 75.01 | 10 | | | | |
| Ethylbenzene | 9.3 | 1.2 | | | | |
| cyclohexane | 93.01 | 12.4 | | | | |

Relative vapor density 3 to 4 [Air = 1]
Density 750 kg/m³ (0.75 g/cm³)
Solubility(ies)

| Media | Result |
|-------|-----------------------|
| Water | Very slightly soluble |

Miscible with water No.
Partition coefficient: n-octanol/water >3
Auto-ignition temperature 257°C (494.6°F)
Decomposition temperature Not available.
Viscosity Kinematic: <20.5 mm²/s (<20.5 cSt) at 40°C
Particle characteristics
Median particle size Not applicable.

Section 10. Stability and reactivity

Reactivity No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

Chemical stability The product is stable.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame).

Incompatible materials Reactive or incompatible with the following materials: oxidizing materials.
Chlorine and Fluorine

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Test | Species | Result | Exposure | Remarks |
|-------------------------|------|---------|--------|----------|---------|
|-------------------------|------|---------|--------|----------|---------|

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| | | | | | |
|----------|-----------------------|--------|-----------------------------------|---------|-------------------|
| Gasoline | LC50 Inhalation Vapor | Rat | >5610 g/m ³ analytical | 4 hours | Based on Gasoline |
| | LC50 Inhalation Vapor | Rat | >7630 mg/m ³ Nominal | 4 hours | Based on Gasoline |
| | LD50 Dermal | Rabbit | >2000 mg/kg | - | Based on Gasoline |
| | LD50 Oral | Rat | >5000 mg/kg | - | Based on Gasoline |
| Ethanol | LC50 Inhalation Vapor | Rat | 124.7 mg/l | 4 hours | Based on Ethanol |
| | LC50 Inhalation Vapor | Rat | 116.9 mg/l | 4 hours | Based on Ethanol |
| | LC50 Inhalation Vapor | Rat | 133.8 mg/l | 4 hours | Based on Ethanol |
| | LD50 Oral | Rat | 10470 mg/kg | - | Based on Ethanol |

Conclusion/Summary Not classified. Based on available data, the classification criteria are not met.

Irritation/Corrosion

| Product/ingredient name | Species | Result | Score | Exposure | Observation | Conc. | Remarks |
|-------------------------|---------|------------------------------------|-------|----------|-------------|-------|-------------------|
| Gasoline | Rabbit | Eyes - Non-irritating to the eyes. | - | - | - | - | Based on Gasoline |
| | Rabbit | Skin - Irritant | - | - | - | - | Based on Gasoline |
| Ethanol | Rabbit | Eyes - Cornea opacity | - | - | - | - | Based on Ethanol |
| | Rabbit | Eyes - Iris lesion | - | - | - | - | Based on Ethanol |
| | Rabbit | Eyes - Irritant | - | - | - | - | Based on Ethanol |
| | Rabbit | Skin - Non-irritant to skin. | - | - | - | - | Based on Ethanol |

Skin Causes skin irritation.

Eyes Causes serious eye irritation.

Sensitizer

| Product/ingredient name | Route of exposure | Species | Result | Remarks |
|-------------------------|-------------------|------------|-----------------|-------------------|
| Gasoline | skin | Guinea pig | Not sensitizing | Based on Gasoline |

Skin Not classified. Based on available data, the classification criteria are not met.

Mutagenicity

| Product/ingredient name | Test | Experiment | Result | Remarks |
|-------------------------|------------------------|---|----------|-------------------|
| Gasoline | Equivalent to OECD 476 | Experiment: In vitro Subject: Mammal - species unspecified | Negative | Based on Gasoline |
| | Equivalent to OECD 471 | Experiment: In vitro Subject: Non-mammalian species | Negative | Based on Gasoline |

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|---------|---------------------------|--|----------|---------------------------------------|
| | EPA OPPTS 870.5395 | Experiment: In vivo | Negative | Based on Gasoline vapor condensate |
| | | Subject: Unspecified Cell: Germ | | |
| | Equivalent to OECD 475 | Experiment: In vivo | Negative | Based on Gasoline |
| | | Subject: Unspecified Cell: Germ | | |
| Ethanol | Equivalent to OECD 476 | Experiment: In vitro | Negative | Based on Ethanol |
| | | Subject: Mammal - species unspecified | | |
| | Equivalent to OECD 473 | Experiment: In vitro | Negative | Based on Ethanol |
| | | Subject: Non- mammalian species | | |
| | Equivalent to OECD 478 | Experiment: In vivo | Negative | Based on Ethanol |
| | | Subject: Unspecified Cell: Germ | | |

Conclusion/Summary May cause genetic defects.

Carcinogenicity

| Product/ingredient name | Test authority / Test number | Species | Route | Exposure | Result | Remarks |
|-------------------------|------------------------------|---------|------------|-----------|-------------------------------------|-------------------|
| Gasoline | Equivalent to OECD 451 | Mouse | Dermal | 102 weeks | Negative - Dermal - Unspecified | Based on Gasoline |
| | Equivalent to OECD 451 | Rat | Inhalation | 113 weeks | Negative - Inhalation - Unspecified | Based on Gasoline |
| Ethanol | Equivalent to OECD - | Rat | Oral | 104 weeks | Negative - Oral - Unspecified | Based on Ethanol |
| | EPA OPPTS 870.4200 | Mouse | Oral | 105 weeks | Positive - Oral - Unspecified | Based on Ethanol |

Conclusion/Summary May cause cancer.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|--|
| Gasoline | - | 2B | - |
| Toluene | - | 3 | - |
| xylene | - | 3 | - |
| Benzene | + | 1 | Known to be a human carcinogen. |
| Ethylbenzene | - | 2B | - |
| naphthalene | - | 2B | Reasonably anticipated to be a human carcinogen. |

Descriptors:

OSHA:
+ - Potential occupational carcinogen

IARC:
1 - Carcinogenic to human.
2A - Probable human carcinogen.
2B - Possible carcinogen to human.
3 - Not classifiable as a human carcinogen.
4 - Probably not a human carcinogen.

NTP:
Proven - Known to be human carcinogens.
Possible - Reasonably anticipated to be human carcinogens.

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Result | Exposure |
|-------------------------|-------------------|-----------|-------------------|---------|--------|----------|
| | | | | | | |

Section 11. Toxicological information

| | | | | | | |
|----------|---|----------|----------|-----|------------|--------------|
| Gasoline | - | - | Negative | Rat | Inhalation | 14 days |
| | - | Negative | - | Rat | Inhalation | 2 generation |
| Ethanol | - | - | Negative | Rat | Inhalation | 18 days |
| | - | Positive | - | Rat | Oral | 2 generation |

Conclusion/Summary

Development: Suspected of damaging the unborn child.
 Fertility: Not classified. Based on available data, the classification criteria are not met.
 Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|------------------------|------------|-------------------|------------------------------|
| Gasoline | Category 3 | - | Narcotic effects |
| Toluene | Category 3 | - | Narcotic effects |
| xylene | Category 3 | - | Respiratory tract irritation |
| 1,2,4-Trimethylbenzene | Category 3 | - | Respiratory tract irritation |
| Ethylbenzene | Category 3 | - | Respiratory tract irritation |
| cyclohexane | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|---------|------------|-------------------|----------------|
| Toluene | Category 2 | - | hearing organs |
| Benzene | Category 1 | - | blood system |

Aspiration hazard

| Name | Result |
|--------------|--------------------------------|
| Gasoline | ASPIRATION HAZARD - Category 1 |
| Toluene | ASPIRATION HAZARD - Category 1 |
| xylene | ASPIRATION HAZARD - Category 1 |
| Benzene | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene | ASPIRATION HAZARD - Category 1 |
| cyclohexane | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact

Causes serious eye irritation.

Skin contact

Causes skin irritation.

Inhalation

Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Ingestion

Irritating to mouth, throat and stomach. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

Section 11. Toxicological information

| | |
|---------------------|--|
| Skin contact | Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations |
| Inhalation | Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness |
| Ingestion | Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

General Solvent "sniffing" (abuse) or intentional overexposure to vapors can produce serious central nervous system effects, including unconsciousness, and possibly death.

Carcinogenicity May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity May cause genetic defects.

Teratogenicity Suspected of damaging the unborn child.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|------------------------------|------------------|
| Oral | >2000 mg/kg |
| Dermal | >2000 mg/kg |
| Inhalation (vapors) | >20 mg/l |
| Inhalation (dusts and mists) | >5 mg/l |

Other information Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

Additional information Gasoline - Excess exposure to vapors may produce headaches, dizziness, nausea, drowsiness, irritation of eyes, nose and throat and central nervous system depression. Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Inhalation of unleaded gasoline vapors did not produce birth defects in laboratory animals. Ingestion of this material can cause gastrointestinal irritation and diarrhea.

In a long-term inhalation study of whole unleaded gasoline vapors, exposure-related kidney damage and kidney tumors were observed in male rats. Similar kidney effects

Section 11. Toxicological information

were not seen in female rats or in mice. At the highest exposure level (2056 ppm), female mice had an increased incidence of liver tumors. Results from subsequent scientific studies have shown that a broad variety of chemicals cause these kidney effects only in the male rat. Further studies have discovered the means by which the physiology of the male rat uniquely predispose it to these effects. Consequently, the Risk Assessment Forum of the Environmental Protection Agency has recognized that these responses are not predictive of a human health hazard. The liver tumors that were increased in the high-dose female mice are likewise of questionable significance because of their high spontaneous occurrence even without chemical exposure and because the rate of their occurrence is accelerated by a broad spectrum of chemicals not commonly considered to be carcinogens (e.g., phenobarbital). Thus, the significance of the mouse liver tumor response in terms of human health is questionable.

Gasoline is a complex mixture of hydrocarbons and contains benzene (typically no more than 2 volume%), toluene, and xylene. Chronic exposure to high levels of benzene has been shown to cause cancer (leukemia) in humans and other adverse blood effects (anemia). Benzene is considered a human carcinogen by IARC, NTP and OSHA. Over exposure to xylene and toluene can cause irritation to the upper respiratory tract, headache and narcosis. Some liver damage and lung inflammation were seen in chronic studies on xylene in guinea pigs but not in rats.

Solvent "sniffing" (abuse) or intentional overexposure to vapors can produce serious central nervous system effects, including unconsciousness, and possibly death.

Gasoline: Additional toxicity information on components.

Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.

Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests.

Prolonged high level exposure to toluene or xylene has caused some degree of hearing loss in experimental animals.

Inhalation of very high concentrations of gasoline vapors and some of its components can result in cardiac sensitization and irregular heartbeats, leading to potentially fatal changes in heart rhythms. Injection of adrenaline-like agents may enhance this effect.

Benzene: Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death.

Benzene: Long-term overexposure to benzene has been associated with certain types of leukemia in humans. In addition, the International Agency for Research on Cancer (IARC), the National Toxicology Program, and OSHA consider benzene to be a human carcinogen. Chronic exposures to high levels of benzene have been reported to cause adverse blood effects including anemia. Benzene exposure can occur by inhalation and absorption through the skin.

Inhalation and forced feeding studies of benzene in laboratory animals have produced a carcinogenic response in a variety of organs, including possibly leukemia, other adverse effects on the blood, chromosomal changes and some effects on the immune system.

Exposure to benzene at levels up to 300 ppm did not produce birth defects in animal studies; however, exposure to higher dosage levels resulted in a reduction of body weight of the rat pups (fetotoxicity). Changes in the testes have been observed in mice exposed to benzene at 300 ppm, but reproductive performance was not altered in rats exposed to benzene at the same level. Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material.

Toluene: Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material. Deliberate inhalation of high concentrations of toluene has been linked to damage of the brain, liver and kidney. Inhalation of very high concentrations of toluene, such as in cases of solvent abuse, has resulted in sudden death which may be a result

Section 11. Toxicological information

of cardiac arrhythmia or central nervous system depression. Mental and/or growth retardation has been reported in children of women who deliberately inhale toluene during pregnancy (usually at thousands of ppm). Fetal developmental toxicity was observed when pregnant rats were exposed to toluene at levels of 1500 ppm. Maternal toxicity was also observed at this concentration. Prolonged, high level exposure to toluene in laboratory animals has resulted in hearing loss. Exposure studies in rats have resulted in adverse effects on the kidney, liver and central nervous system. Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests. There are occupational studies which report an association between inhalation exposure to toluene and adverse effects on reproduction including spontaneous abortion. The methodology of these studies and the reliability of the results have been questioned. In a two-generation study in rats, inhalation of toluene at levels up to 2000 ppm did not produce adverse effects on fertility or reproductive performance.

Xylenes: Xylene has been reported to cause central nervous system effects at concentrations above the recommended exposure limit. Xylene vapor becomes irritating at relatively high levels. In one study, eye irritation was reported at exposures of 460 ppm and in one person at 230 ppm after 15 minutes. In another study, no one reported eyes, nose and throat irritation at mixed xylene exposures up to 230 ppm for 30 minutes. Dermal LD50 is expected to be greater than 10g/kg in rabbits, based on test results from similar materials.

Mixed xylenes caused slight hearing loss in rats exposed to 800 ppm in the air for 14 hours/day for six weeks. There is no information available for lower concentrations; however, similar chemicals that have caused these hearing effects at similar concentrations have not caused effects at lower concentrations.

Pregnant animals exposed to xylene or its isomers have been reported to cause development toxicity in rodents when exposed by inhalation. The developmental effects observed consisted of delayed development and minor skeletal variations, but no malformations. Because of the high exposure levels used in these studies, we do not believe that these results imply an increased risk of reproductive toxicity to workers exposed to xylene levels at or below the exposure limits.

Xylene and its isomers are not genotoxic.

Technical grade xylene has been tested in a National Toxicology Program carcinogenicity study in rats and mice dosed orally for two years. There was no evidence of carcinogenicity.

Ethylbenzene: The National Toxicology Program (NTP) conducted a 13-week inhalation study with male and female rats and mice at exposure concentrations ranging from 100 to 1000 ppm ethylbenzene. No rats or mice died during the study. Kidney, liver, and lung weights were increased in the exposed rats, while weight increases were observed only in the livers of exposed mice. Treatment-related histopathologic changes were not observed in any tissues of rats and mice.

NTP also exposed male and female rats and mice by inhalation to 0, 75, 250, or 750 ppm ethylbenzene for 2 years. There was a statistically significant increase in the number of kidney tumors in male and female rats at 750 ppm. There were also increased incidences of lung tumors in male mice and liver tumors in female mice that were statistically significant at 750 ppm. Except for the male rat kidney tumors, the incidence of the tumors were within the range observed for non-exposed animals from other studies conducted by NTP. The significance of these findings to humans is unknown. Ethylbenzene is not genotoxic. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and found it to be possibly carcinogenic to humans (Group 2B).

Ethylbenzene is not genotoxic.

This product contains trimethylbenzenes. These compounds cause irritation to the eyes, nose and respiratory tract. Repeated dermal exposure can defat and irritate the skin. Inhalation may cause dizziness and drowsiness. Studies in laboratory animals with mixtures of C9 aromatic hydrocarbons produced adverse effects on development such as increased fetal mortality, reduced fetal weight, and delayed ossification at high exposure concentrations. Effects were reduced if exposure was terminated prior to delivery. There was no evidence of reproductive toxicity.

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Naphthalene has been reported to cause developmental toxicity in mice after oral exposure to relatively high dose levels, but developmental toxicity was not observed in NTP (National Toxicology Program) sponsored studies in rats and rabbits. Ingestion or inhalation of naphthalene can result in hemolysis and other blood abnormalities, and individuals (and infants) deficient in glucose-6-phosphate dehydrogenase may be especially susceptible to these effects. Inhalation of naphthalene may cause headache and nausea. Airborne exposure can result in eye irritation. Naphthalene exposure has been associated with cataracts in animals and humans.

Ethanol - Human data: In humans excessive consumption of alcoholic beverages during pregnancy is associated with the induction of Fetal Alcohol Syndrome in the offspring. Reduced birth weight and physical and mental defects occur. There is no evidence that such effects might be caused by exposures other than direct ingestion of alcoholic drinks. In humans high lifetime consumption of alcoholic beverages can be associated with certain cancers and effects on the liver. There is no evidence that these can be caused by exposure other than direct ingestion of alcoholic drinks (IARC 1988).

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

| Product/ingredient name | Species | Test/Result | Exposure | Effects | Remarks |
|-------------------------|----------------|---|----------|-------------------|--|
| Gasoline | Micro-organism | Acute EC50 15.41 mg/l Nominal Fresh water | 40 hours | growth inhibition | - |
| | Algae | Acute EL50 3.1 mg/l Nominal Fresh water | 72 hours | (growth rate) | Based on Gasoline |
| | Algae | Acute EL50 3.7 mg/l Nominal Fresh water | 96 hours | (growth rate) | Based on Gasoline |
| | Daphnia | Acute EL50 4.5 mg/l Nominal Fresh water | 48 hours | Mobility | Based on straight-run light gasoline |
| | Fish | Acute LL50 10 mg/l Nominal Fresh water | 96 hours | Mortality | Based on Naphtha (petroleum), isomerisation |
| | Fish | Acute LL50 8.2 mg/l Nominal Fresh water | 96 hours | Mortality | Based on Naphtha (petroleum), light alkylate |
| | Algae | Acute NOELR 0.5 mg/l Nominal Fresh water | 72 hours | (growth rate) | Based on Gasoline |
| | Daphnia | Acute NOELR 0.5 mg/l Nominal Fresh water | 48 hours | Mobility | Based on Straight run gas oil |
| | Daphnia | Chronic EL50 10 mg/l Nominal Fresh water | 21 days | Reproduction | Based on Naphtha (petroleum), light alkylate |
| | Daphnia | Chronic EL50 >40 mg/l Nominal Fresh water | 21 days | Mobility | Based on Naphtha (petroleum), light |

Section 12. Ecological information

alkylate

| | | | | | |
|---------|----------------|--|----------|--------------|--|
| | Fish | Chronic EL50 10 mg/l Nominal Fresh water | 21 days | Reproduction | Based on: Naphtha (petroleum), light alkylate; read across between species |
| | Fish | Chronic LL50 5.2 mg/l Nominal Fresh water | 14 days | Mortality | Based on Naphtha (petroleum), light catalytic reformed |
| | Daphnia | Chronic NOELR 2.6 mg/l Nominal Fresh water | 21 days | Reproduction | Based on Naphtha (petroleum), light alkylate |
| | Daphnia | Chronic NOELR 16 mg/l Nominal Fresh water | 21 days | Mobility | Based on Naphtha (petroleum), light alkylate |
| | Fish | Chronic NOELR 2.6 mg/l Nominal Fresh water | 14 days | Mortality | Based on Naphtha (petroleum), light catalytic reformed |
| | Fish | Chronic NOELR 2.6 mg/l Nominal Fresh water | 21 days | Reproduction | Based on: Naphtha (petroleum), light alkylate; read across between species |
| | soil, plants | Chronic PNEC >0.4 mg/kg | - | - | - |
| Ethanol | Algae | EC50 675 mg/l | 4 days | - | Based on Ethanol |
| | Aquatic plants | EC50 4432 mg/l | 7 days | - | Based on Ethanol |
| | Daphnia | Acute LC50 5012 mg/l | 48 hours | - | Based on Ethanol |
| | Fish | Acute LC50 153 g/l | 96 hours | - | Based on Ethanol |
| | Fish | Acute LC50 14.2 g/l | 96 hours | - | Based on Ethanol |
| | Daphnia | Chronic LC50 2 mg/l | 10 days | - | Based on Ethanol |
| | Daphnia | Chronic LC50 9.6 mg/l | 9 days | - | Based on Ethanol |

Conclusion/Summary Toxic to aquatic life with long lasting effects.

Persistence and degradability

Expected to be biodegradable.

| Product/ingredient name | Test | Result | Remarks |
|-------------------------|------|--------|---------|
|-------------------------|------|--------|---------|

Section 12. Ecological information

| | | | |
|---------|-----|--------------------------|------------------|
| Ethanol | EPA | 95 % - Readily - 15 days | Based on Ethanol |
| | EPA | 84 % - Readily - 20 days | Based on Ethanol |
| | EPA | 74 % - Readily - 5 days | Based on Ethanol |
| | EPA | 74 % - Readily - 10 days | Based on Ethanol |

Conclusion/Summary Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Ethylbenzene | - | - | Inherent |

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Soil/water partition coefficient (K_{oc}) Not available.

Mobility Spillages may penetrate the soil causing ground water contamination.

Other adverse effects No known significant effects or critical hazards.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.







United States - RCRA Toxic hazardous waste "U" List

| Ingredient | CAS # | Status | Reference number |
|-----------------|-----------|--------|------------------|
| Toluene | 108-88-3 | Listed | U220 |
| Xylene | 1330-20-7 | Listed | U239 |
| Benzene (I,T) | 71-43-2 | Listed | U019 |
| Cyclohexane (I) | 110-82-7 | Listed | U056 |

Section 14. Transport information

| | DOT Classification | TDG Classification | IMDG | IATA |
|--------------------------------|--|-----------------------------------|--|-----------------------------------|
| UN number | - | - | - | - |
| UN proper shipping name | See: Special precautions for user RQ (Benzene, xylene) | See: Special precautions for user | See: Special precautions for user. Marine pollutant | See: Special precautions for user |
| | | | | |

Section 14. Transport information

| | | | | |
|-----------------------------------|---|--|---|--|
| Transport hazard class(es) | 3  | 3   | 3   | 3  |
| Packing group | II | II | II | II |
| Environmental hazards | No. | Yes. | Yes. | Yes. The environmentally hazardous substance mark is not required. |
| Additional information | Reportable quantity 263.16 lbs / 119.47 kg [42.082 gal / 159.3 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail. | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-E | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

Special precautions for user

Proper classification to be determined at the time of shipment

Select UN number and Proper Shipping Name based on the ethanol content of the product:

Ethanol 0 - 10%: UN1203 GASOLINE

Ethanol >10 - 15%: UN3475 ETHANOL AND GASOLINE MIXTURE

Transport in bulk according to IMO instruments

Proper shipping name

MARPOL Annex 1 rules apply for bulk shipments by sea.

Category: gasoline and spirits

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b)

All components are active or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification

FLAMMABLE LIQUIDS - Category 1
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 GERM CELL MUTAGENICITY - Category 1
 CARCINOGENICITY - Category 1A
 TOXIC TO REPRODUCTION - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 ASPIRATION HAZARD - Category 1
 HNOC - Static-accumulating flammable liquid

SARA 313

Section 15. Regulatory information

| | Product name | CAS number | Concentration |
|--|------------------------|------------|---------------|
| Form R - Reporting requirements | Toluene | 108-88-3 | 4 - 11 |
| | xylene | 1330-20-7 | 4 - 11 |
| | Benzene | 71-43-2 | 0 - 3.8 |
| | 1,2,4-Trimethylbenzene | 95-63-6 | 0 - 3 |
| | Ethylbenzene | 100-41-4 | 0 - 2 |
| | cyclohexane | 110-82-7 | 0 - 1 |
| | Naphthalene | 91-20-3 | 0 - 0.5 |
| Supplier notification | Toluene | 108-88-3 | 4 - 11 |
| | xylene | 1330-20-7 | 4 - 11 |
| | Benzene | 71-43-2 | 0 - 3.8 |
| | 1,2,4-Trimethylbenzene | 95-63-6 | 0 - 3 |
| | Ethylbenzene | 100-41-4 | 0 - 2 |
| | cyclohexane | 110-82-7 | 0 - 1 |
| | Naphthalene | 91-20-3 | 0 - 0.5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

The following components are listed: ETHYL ALCOHOL; TOLUENE; XYLENE; BENZENE; PSEUDOCUMENE; ETHYL BENZENE; CYCLOHEXANE

New Jersey

The following components are listed: ETHYL ALCOHOL; TOLUENE; XYLENES; BENZENE; PSEUDOCUMENE; ETHYL BENZENE; CYCLOHEXANE; NAPHTHALENE

Pennsylvania

The following components are listed: GASOLINE; ETHANOL; BENZENE, METHYL-; BENZENE, DIMETHYL-; BENZENE; PSEUDOCUMENE; BENZENE, ETHYL-; CYCLOHEXANE

California Prop. 65

Other Prop 65 chemicals will result under certain conditions from the use of this material. For example, burning fuels produces combustion products including carbon monoxide, a Prop 65 reproductive toxin.

⚠️ WARNING: This product can expose you to chemicals including Benzene, Benzene and Benzene, which are known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Gasoline, Ethylbenzene, Naphthalene, Ethylbenzene, cumene, Ethylbenzene, Ethylbenzene, cumene, Naphthalene, Naphthalene, Naphthalene, acetaldehyde, Furan, Propylene oxide and Styrene, which are known to the State of California to cause cancer, and Toluene, Toluene, Toluene and Toluene, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Other regulations

Australia inventory (AIC)

At least one component is not listed.

Canada inventory

Not determined.

China inventory (IECSC)

At least one component is not listed.

Japan inventory (CSCL)

At least one component is not listed.

Korea inventory (KECI)

At least one component is not listed.

Philippines inventory (PICCS)

At least one component is not listed.

Taiwan Chemical Substances Inventory (TCSI)

At least one component is not listed.

REACH Status

For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Other information

National Fire Protection Association (U.S.A.)



History

| | | | | |
|---------------------|----------------------------------|---------------------|-------------------------|--------------------|
| Product name | BP Unleaded Gasolines | Product code | 12631 | Page: 20/21 |
| Version 4.02 | Date of issue 10/27/2022. | Format US | Language ENGLISH | |

Section 16. Other information

| | |
|---------------------------------------|---|
| Date of issue/Date of revision | 10/27/2022. |
| Date of previous issue | 02/23/2022. |
| Prepared by | Product Stewardship |
| Key to abbreviations | ACGIH = American Conference of Industrial Hygienists ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS Number = Chemical Abstracts Service Registry Number GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OEL = Occupational Exposure Limit SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average UN = United Nations UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods. Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1 |

✔ Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

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