



U. S. Oil & Refining Co.

3001 Marshall Avenue, Tacoma, Washington, 98421 (253) 383-1651

Product Specification Gasoline

<u>Properties</u>	<u>ASTM Method</u>	<u>Specifications</u>	
		<u>Min</u>	<u>Max</u>
Sulfur, ppmw.....	D 5453.....		80
Mercaptan, Doctor	D 4952.....		Negative ¹
Corrosion, Copper, 3h@50°C, class.	D 130.....		1B
Corrosion, Silver Strip, class	D 7671.....		1
Oxidation Stability, minutes.	D 525.....	240	
Lead Alkyl Content g/L (g/ US gal). .EPA ²			0.013 (0.05)
Gum Content, washed, mg/100 mL ..D 381.....			5

Product Octane Grades:

Antiknock Index, (R+M)/2	D 2699, D 2700
Premium grade	92.0
Mid-grade.....	89.0
Regular grade	87.0

This material may contain up to 10 volume % ethanol.

1) The doctor test "negative" requirement may be waived if the gasoline has a mercaptan sulfur content, D 3227, no greater than 20 ppmw and a merchantable odor.

2) EPA 40CFR80, App. B.



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Gasoline Product Specification

Seasonal Volatility Table

Property	ASTM Method	Nov.1 – Mar. 31		Apr. 1 – Apr. 30		May 1 – Sep. 15		Sep. 16 – Sep. 30		Oct. 1 – Oct. 31	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Volatility class	D4814, Table 4	E-5		D-4		A-3		C-3		D-4	
Distillation, °C (°F)	D 86										
10% Evap			50(122)		55(131)		70(158)		60(140)		55(131)
50% Evap		77(170) ³	110(230)	77(170) ³	113(235)	77(170)	121(250)	77(170)	116(240)	77(170) ³	113(235)
90% Evap			185(365)		185(365)		190(374)		185(365)		185(365)
End Point			225(437)		225(437)		225(437)		225(437)		225(437)
Residue,%			2		2		2		2		2
Vapor Pressure kPa (psi)	D 5191-01		103(15.0)		93(13.5)		62(9.0)		79(11.5)		93(13.5)

3) Conventional gasoline, not intended for blending with ethanol, 50% distillation minimum is 66°C(150°F) for distillation classes D&E.



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Date of Preparation: October 23, 2019

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: October 23, 2019

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
Reproductive Toxicity, Category 2



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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: H224: Extremely flammable liquid and vapor.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H340: May cause genetic defects.
H350: May cause cancer.
H361: Suspected of damaging fertility or the unborn child.
H336: May cause drowsiness or dizziness.
H372: Causes damage to organs through prolonged or repeated exposure.
H304: May be fatal if swallowed and enters airways.

PRECAUTIONARY STATEMENTS

Prevention: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating, and lighting equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P260: Do not breathe mist, vapours, or spray.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves, protective clothing and eye protection.

Response: P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313: IF exposed or concerned: Get medical advice/attention.



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P312: Call a POISON CENTER or doctor if you feel unwell.
 P331: Do NOT induce vomiting.
 P332 + P313: If skin irritation occurs: Get medical advice/attention.
 P337 + P313: If eye irritation persists: Get medical advice/attention.
 P362 + P364: Take off contaminated clothing and wash it before reuse.
 P370 + P378: In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish.

Storage: P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
 P235: Keep cool.
 P405: Store locked up.

Disposal: P501: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards 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).

This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

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

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



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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



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.



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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.

Section 6: ACCIDENTAL RELEASE MEASURES

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

EXPOSURE LIMITS

Component	ACGIH	OSHA
Gasoline [CAS No. 8006-61-9]	300 ppm (TWA); 500 ppm (STEL); A3 (1990)	300 ppm (TWA); 500 ppm (STEL) [Vacated];
Toluene [CAS No. 108-88-3]	20 ppm (TWA); A4; BEI (2006)	200 ppm (TWA); 300 ppm (C); 500 ppm (Peak) (Maximum duration: 10 minutes.) 100 ppm (TWA); 150 ppm (STEL) [Vacated]
Xylene [CAS No. 1330-20-7]	100 ppm (TWA); 150 ppm (STEL); A4; BEI (1992)	100 ppm (TWA), 435 mg/m ³ (TWA) 150 ppm (STEL) [Vacated]
n-Hexane [CAS No. 110-54-3]	50 ppm (TWA); Skin, BEI (1996)	500 ppm (TWA), 1800 mg/m ³ (TWA); Skin. 50 ppm (TWA) [Vacated]
Ethanol [CAS No. 64-17-5]	1000 ppm (TWA); A3 (2008)	1000 ppm (TWA), 1900 mg/m ³ (TWA)
Ethylbenzene [CAS No. 100-41-4]	20 ppm (TWA); A3; BEI (2010)	100 ppm (TWA), 435 mg/m ³ (TWA) 125 ppm (STEL) [Vacated]



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1,2,4-Trimethylbenzene [CAS No. 95-63-6]	25 ppm (TWA); (1970)	No PEL established.
2,2,4-Trimethylpentane [CAS No. 540-84-1]	300 ppm (TWA); (1979)	No PEL established.
Benzene [CAS No. 71-43-2]	0.5 ppm (TWA); 2.5 ppm (STEL); Skin; A1; BEI (1996)	1 ppm (TWA); 5 ppm (STEL)
Cyclohexane [CAS No. 110-82-7]	100 ppm (TWA); (1964)	300 ppm (TWA), 1050 mg/m ³ (TWA)
Naphthalene [CAS No. 91-20-3]	10 ppm (TWA); Skin; A3 (2013)	10 ppm (TWA), 50 mg/m ³ (TWA) 15 ppm (STEL) [Vacated]
Cumene [CAS No. 98-82-8]	50 ppm (TWA); (1997)	50 ppm (TWA), 245 mg/m ³ (TWA); Skin.

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.

Hand Protection:

Wear protective gloves. Consult manufacturer specifications for further information.

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.

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:	Petroleum hydrocarbon. Gasoline.
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



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Percent Volatile, wt. %: 100
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.
Incompatible Materials: Strong acids. Strong oxidizers.
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

Component	CAS No.	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀
Gasoline	8006-61-9	Not available.	Not available.	300000 mg/m ³ (rat); 5M
Toluene	108-88-3	2600 mg/kg (rat)	14.1 mL/kg (rabbit)	49000 mg/m ³ (rat); 4H
Xylene	1330-20-7	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	5000 ppm (rat); 4H
n-Hexane	110-54-3	25000 mg/kg (rat)	Not available.	48000 ppm (rat); 4H
Ethanol	64-17-5	7060 mg/kg (rat)	20000 mg/kg (rabbit)	20000 ppm (rat); 10H
Ethylbenzene	100-41-4	3500 mg/kg (rat)	17800 µl/kg (rabbit)	Not available.
1,2,4-Trimethylbenzene	95-63-6	5000 mg/kg (rat)	Not available.	18000 mg/m ³ (rat); 4H
2,2,4-Trimethylpentane	540-84-1	Not available.	Not available.	Not available.
Benzene	71-43-2	930 mg/kg (rat)	> 9400 µl/kg (rabbit)	10000 ppm (rat); 7H



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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/m ³ (rat); 1H
Cumene	98-82-8	1400 mg/kg (rat)	12.3 mL/kg (rabbit)	10000 mg/m ³ (mouse); 7H

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Blood. Bone marrow. Liver. Kidneys. Central nervous system. Peripheral nervous system.

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.



CHRONIC EFFECTS (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Cardiovascular system. Bone marrow. Liver. Kidneys. Reproductive system. Central nervous system. Peripheral nervous system.

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).

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Gasoline	A3	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Toluene	A4	Group 3	Not listed.	Not listed.	Not listed.
Xylene	A4	Group 3	Not listed.	Not listed.	Not listed.
Ethanol	A3	Group 1	Not listed.	OSHA Carcinogen.	Not listed.
Ethylbenzene	A3	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Benzene	A1	Group 1	List 1	OSHA Carcinogen.	Listed.
Naphthalene	A3	Group 2B	List 2	OSHA Carcinogen.	Listed.
Cumene	Not listed.	Group 2B	Not listed.	OSHA Carcinogen.	Listed.

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.



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.

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.

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

REGULATORY INFORMATION	ID NUMBER	EMERGENCY RESPONSE GUIDEBOOK	PROPER SHIPPING NAME	CLASS	PACKING GROUP	PLACARD
DOT Classification	UN1203	Guide 128	GASOLINE	3	II	
TDG Classification	UN1203	Guide 128	GASOLINE	3	II	



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IATA/ICAO	UN1203	Guide 128	GASOLINE	3	II	
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Section 15: REGULATORY INFORMATION

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

United States

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

SARA Title III Component

SARA Title III Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112(r) TQ (lbs.)
Toluene	Not listed.	Not listed.	1000	313	U220	Not listed.
Xylene	Not listed.	Not listed.	100	313	U239	Not listed.
n-Hexane	Not listed.	Not listed.	5000	313	Not listed.	Not listed.
Ethylbenzene	Not listed.	Not listed.	1000	313	Not listed.	Not listed.
1,2,4-Trimethylbenzene	Not listed.	Not listed.	Not listed.	313	Not listed.	Not listed.
2,2,4-Trimethylpentane	Not listed.	Not listed.	1000	Not listed.	Not listed.	Not listed.
Benzene	Not listed.	Not listed.	10	313	U019	Not listed.
Cyclohexane	Not listed.	Not listed.	1000	313	U056	Not listed.
Naphthalene	Not listed.	Not listed.	100	313	U165	Not listed.
Cumene	Not listed.	Not listed.	5000	313	U055	Not listed.

SARA SECTION 311/312 - EPA HAZARD CATEGORIES

<u>ACUTE HEALTH</u>	<u>CHRONIC HEALTH</u>	<u>FIRE</u>	<u>SUDDEN RELEASE OF PRESSURE</u>	<u>REACTIVE</u>
X	X	X	-	-



Par Pacific

SAFETY DATA SHEET

Gasoline
Date of Preparation: October 23, 2019

State Regulations
California
California Prop 65:



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

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: October 23, 2019
Version: 2.0
GHS SDS Prepared by: **Deerfoot Consulting Inc.**
Phone: (403) 720-3700