

SAFETY DATA SHEET



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SDS Number 888100008808

Revision Number 2.01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product Name Gasoline, Unleaded E-10

Synonyms Blend of highly flammable petroleum distillates, also containing 10% ethanol

Recommended Use Fuel

Uses advised against All others

Manufacturer Tesoro Refining & Marketing Co.
19100 Ridgewood Parkway
San Antonio, TX 78259

Emergency Telephone Chemtrec: 1-800-424-9300
Tesoro Call Center: 1-877-783-7676

E-mail address ProductStewardship@TSOCORP.com

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 2 Category 1
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Skin Corrosion/Irritation Category	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Chronic Aquatic Toxicity	Category 2
Aspiration toxicity	Category 1

Label elements

Danger

Highly flammable liquid and vapor
Causes skin irritation
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
May cause drowsiness or dizziness by inhalation.
Causes damage to organs through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects

May be fatal if swallowed and enters airways



Appearance Liquid

Physical State @20°C Liquid

Odor Characteristic Hydrocarbon like

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/or bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use CO₂, dry chemical, or foam to extinguish

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed. May be harmful in contact with skin. Toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

General Composition Statement Gasoline is a complex petroleum substance consisting of paraffinic hydrocarbons (normal and branched chains), olefinic hydrocarbons, naphthenic hydrocarbons (cycloparaffins), and aromatic hydrocarbons. Composition may contain additives and/or dyes which are not considered hazardous at the concentration used.

Chemical Name	CAS-No	Percent
Gasoline	86290-81-5	10-80
Xylene	1330-20-7	10-30
Toluene	108-88-3	10-30

Butane	106-97-8	1-20
Ethanol; Ethyl alcohol	64-17-5	0-10
Trimethylbenzene	25551-13-7	1-5
Pentane	109-66-0	1-5
Naphthalene	91-20-3	1-5
Isopentane	78-78-4	1-5
Ethylbenzene	100-41-4	1-5
Cyclohexane	110-82-7	1-5
Benzene	71-43-2	0.1-4.7
N-hexane	110-54-3	0.5-0.75
n-Heptane	142-82-5	0.5-0.75

4. FIRST AID MEASURES

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. Remove from exposure, lie down. In case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt, seek medical advice. Never give anything by mouth to an unconscious person. Take off all contaminated clothing immediately and thoroughly wash material from skin. Immediate medical attention is required.

Inhalation

Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur. Immediate medical attention is required. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists. Note: When using this product in high pressure equipment - Accidental high velocity dermal injection of this material requires immediate medical attention.

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. **ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE.** If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention.

Self-protection of the first aider

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist.

Most important symptoms and effects, both acute and delayed

Symptoms

Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances. A patient adversely affected by exposure to this product should not be given adrenaline (epinephrine) or similar heart stimulant since these would increase the risk of cardiac arrhythmias.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Small Fire	Any extinguisher suitable for Class B fires, dry chemical, CO ₂ , foam (AFFF/ATC), or water spray can be used.
Large Fire	Water spray, fog or alcohol-resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Hazardous combustion products	Smoke, CO, and other products of incomplete combustion.
Explosion data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	Yes.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn.
Further information	ALWAYS stay away from tanks engulfed in fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Do not direct water at source of leak or safety devices; icing may occur. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

<u>NFPA</u>	Health hazards 1	Flammability 3	Stability 0	Physical and chemical properties -
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Do not breathe vapor or mist.

Other Information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Avoid contact with skin and eyes. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation.

Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulator), and may form ignitable vapor-air mixtures in storage tanks or other containers. Precautions to prevent static initiated fire or explosion during transfer, storage or handling, include but are not limited to these examples: (1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquid and vapors that are static accumulators. (2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha). (3) Storage tank level floats must be effectively bonded. For more information on precautions to prevent static-initiated fire or explosion, see NFPA 77 Recommended Practice on Static Electricity and API Recommended Practice 2003 Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store away from other materials. Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids. Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure.

Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL
Gasoline 86290-81-5	STEL: 500 ppm TWA: 300 ppm***	(vacated) TWA: 300 ppm (vacated) TWA: 900 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1500 mg/m ³ ***
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm***	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³ ***
Toluene 108-88-3	TWA: 20 ppm***	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm***
Butane 106-97-8	STEL: 1000 ppm***	(vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³ ***
Ethanol; Ethyl alcohol 64-17-5	STEL: 1000 ppm***	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³ ***
Trimethylbenzene 25551-13-7	TWA: 25 ppm***	(vacated) TWA: 25 ppm (vacated) TWA: 125 mg/m ³ ***
Pentane 109-66-0	TWA: 1000 ppm***	TWA: 1000 ppm TWA: 2950 mg/m ³ (vacated) TWA: 600 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 750 ppm (vacated) STEL: 2250 mg/m ³ ***
Naphthalene 91-20-3	TWA: 10 ppm S****	TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³ ***
Isopentane 78-78-4	TWA: 1000 ppm***	-
Ethylbenzene 100-41-4	TWA: 20 ppm***	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³ ***
Cyclohexane 110-82-7	TWA: 100 ppm***	TWA: 300 ppm TWA: 1050 mg/m ³ (vacated) TWA: 300 ppm (vacated) TWA: 1050 mg/m ³ ***
Benzene 71-43-2	STEL: 2.5 ppm TWA: 0.5 ppm S****	TWA: 10 ppm applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028 TWA: 1 ppm (vacated) TWA: 10 ppm unless specified in 1910.1028 (vacated) STEL: 50 ppm 10 min unless specified in 1910.1028 (vacated) Ceiling: 25 ppm unless specified in 1910.1028

		Ceiling: 25 ppm STEL: 5 ppm see 29 CFR 1910.1028***
N-hexane 110-54-3	TWA: 50 ppm S****	TWA: 500 ppm TWA: 1800 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m ³ ***
n-Heptane 142-82-5	STEL: 500 ppm TWA: 400 ppm***	TWA: 500 ppm TWA: 2000 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m ³ ***

S* - Potential exposure by cutaneous route

NOTE: Limits shown for guidance only. For additional information, OSHA's 1989 air contaminants standard exposure limits provided even though the limits were vacated in 1992. State, local or other agencies or advisory groups may have established more stringent limits. Follow applicable regulations.

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand Protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
Antistatic boots.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use a NIOSH approved respirator when there is a potential for airborne concentrations to exceed occupational exposure limits. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2, NIOSH Respirator Decision Logic, and the respirator manufacturer for additional guidance on respiratory protection selection. A Self-Contained Breathing Apparatus (SCBA) should be used for fire fighting. Use a NIOSH approved positive-pressure supplied air respirator if there is a potential for uncontrolled release, exposure levels are unknown, in oxygen deficient (less than 19.5% oxygen), or any other circumstance where an air-purifying respirator may not provide adequate protection.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State @20°C Liquid
Appearance Liquid
Odor Characteristic Hydrocarbon like
Color Clear to straw
Odor threshold 0.5 - 1.1

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	

Melting point / freezing point	-101 °C / -150 °F
Boiling range	No data available
Flash point	-21 °C / -5.8 °F
Evaporation rate	No data available
Flammability (solid, gas)	Flammable vapor released by liquid
Flammability Limit in Air %	
Upper flammability limit:	7.6 %(V)
Lower flammability limit:	1.3 %(V)
Vapor pressure	345 - 1,034 hPa at 37.8 °C (100.0 °F)
Vapor density	Approximately 3 to 4
Relative density	0.8 g/mL
Water solubility	Negligible
Solubility in other solvents	No data available
Partition coefficient	2 – 7 as log Pow
Autoignition temperature	250 °C / 482 °F
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Minimum Ignition Energy (mJ)	No data available
K_{st} (bar.m/s)	No data available
Softening point	No data available
VOC Content (%)	No data available
Density	No data available
Bulk density	Not applicable
Conductivity	Hydrocarbon liquids without static dissipater additive may have conductivity below 1 picoSiemens per meter (pS/m). The highest electro-static ignition risks are associated with "ultra-low conductivities" below 5 pS/m. See Section 7 for sources of information on defining safe loading and handling procedures for low conductivity products

10. STABILITY AND REACTIVITY

Reactivity	This product is non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Excessive heat.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Toxic by inhalation. (based on components). May cause drowsiness or dizziness by inhalation.
Eye contact	Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components).
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema

and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Symptoms

Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	2,369.00 mg/kg
ATEmix (dermal)	2,871.00 mg/kg
ATEmix (inhalation-gas)	1,384,041.64 mg/l
ATEmix (inhalation-dust/mist)	1.00 mg/l

Component Information

Chemical Name	Oral LD50	LD50/dermal/rat - NO UNITS (Wizards mg/kg)	Inhalation LC50
Gasoline 86290-81-5	= 92 g/kg (Rat)***	> 2000 mg/kg (Rabbit)***	> 5.2 mg/L (Rat) 4 h***
Xylene 1330-20-7	= 3500 mg/kg (Rat)***	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)***	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h***
Toluene 108-88-3	= 2600 mg/kg (Rat)***	= 12000 mg/kg (Rabbit)***	= 12.5 mg/L (Rat) 4 h***
Butane 106-97-8	-	-	= 658 g/m ³ (Rat) 4 h***
Ethanol; Ethyl alcohol 64-17-5	= 7060 mg/kg (Rat)***	-	= 124.7 mg/L (Rat) 4 h***
Trimethylbenzene 25551-13-7	= 8970 mg/kg (Rat)***	-	-
Pentane 109-66-0	> 2000 mg/kg (Rat)***	= 3000 mg/kg (Rabbit)***	= 364 g/m ³ (Rat) 4 h***
Naphthalene 91-20-3	= 1110 mg/kg (Rat) = 490 mg/kg (Rat)***	= 1120 mg/kg (Rabbit) > 20 g/kg (Rabbit)***	> 340 mg/m ³ (Rat) 1 h***
Isopentane 78-78-4	-	-	= 280000 mg/m ³ (Rat) 4 h***
Ethylbenzene 100-41-4	= 3500 mg/kg (Rat)***	= 15400 mg/kg (Rabbit)***	= 17.4 mg/L (Rat) 4 h***
Cyclohexane 110-82-7	= 12705 mg/kg (Rat)***	> 2000 mg/kg (Rabbit)***	= 13.9 mg/L (Rat) 4 h***
Benzene 71-43-2	= 1800 mg/kg (Rat) = 810 mg/kg (Rat)***	> 8200 mg/kg (Rabbit)***	= 44.66 mg/L (Rat) 4 h***
N-hexane 110-54-3	= 25 g/kg (Rat)***	= 3000 mg/kg (Rabbit)***	= 48000 ppm (Rat) 4 h***
n-Heptane 142-82-5	-	= 3000 mg/kg (Rabbit)***	= 103 g/m ³ (Rat) 4 h***

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chemical Name

Xylene

Mixed xylenes can cause skin, eye, and respiratory irritation. Both short- and long-term repeated exposures to high enough levels in humans have resulted in a variety of adverse nervous system effects that include headache, mental confusion, narcosis, equilibrium, impaired short-term memory, dizziness and tremors. Studies in laboratory animals indicate that xylene can cause changes in the liver and harmful effects on the kidneys, lungs, heart, and nervous system as well as hearing loss. The relevance of these observations to humans is not clear at this time. In general, developmental studies in animals reported adverse fetal effects only at concentrations that caused maternal toxicity. The relevance of

these observations to humans is unclear at this time. The available data from in vitro and in vivo studies suggest that xylenes are not mutagenic and do not produce chromosomal abnormalities. Furthermore, rats exposed up to 500 mg/kg bw and mice exposed up to 1000 mg/kg bw mixed xylenes for 103 weeks showed no treatment-related increases in any tumor type. IARC has determined that the carcinogenicity of xylenes is not classifiable (Group 3).

Butane

If inhaled, short-term overexposure to hydrocarbon gases may cause rapid suffocation. Inhalation of butane at very high concentrations can cause drowsiness, narcosis, asphyxia, and cardiac arrhythmia; butane affects the central nervous system (CNS). As gases, the primary route of exposure is inhalation; compressed gases may exhibit additional hazards. In animal studies, 2-Butene was the most toxic of the C1-4 hydrocarbon gas (C1-4 HCs) evaluated for its short term (acute) toxicity when inhaled for four hours at 10,000 ppm (23.1 g/m³); no fatalities were observed, and no LC50 value was established. Repeated dose toxicity has been observed in combination with testing for reproductive and developmental toxicity; the lowest dose at which adverse effects were observed (LOAEL) following repeated dose reported to be 5,000 ppm. Adverse effects included lowered body weight, though some changes in blood chemistry were also reported. C1-4 HCs were not mutagenic in several test systems using bacteria or mammalian cells, nor were they mutagenic in animal studies. No adverse developmental effects were reported for the highest dose tested (NOAEL ≥ 5,000 ppm). Reproductive toxicity was reported for isobutene (LOAEL = 9,000 ppm) as reduced fertility in females and pregnancy loss; caution should be used in interpreting the results of this study due to the small number of animals tested. The carcinogenicity of individual petroleum streams varies due to factors such as source and processing; IARC and ECHA C&L Inventory reports individually on the carcinogenicity of these substances.

Ethanol; Ethyl alcohol

Short term (acute) direct contact with liquid ethanol to eyes or skin may cause eye irritation or dry skin. Acute exposure to ethanol by inhalation of high concentrations of vapor may cause irritation of the eyes and respiratory tract. Inhalation studies show that ethanol overexposure can produce incoordination and narcosis (drowsiness or unconsciousness) and ethanol targets the central nervous system. Long term or repeated to high enough levels by skin contact with liquid ethanol can result in defatting of the skin and dermatitis. There is little evidence to suggest that ethanol is genotoxic; it may have a very limited capacity to induce genetic changes in vivo at very high doses achievable in humans by deliberate oral ingestion. Evidence of the carcinogenicity of ethanol in humans is confined to studies assessing the impact of alcoholic beverage consumption. IARC has classified ethanol in alcoholic beverages as carcinogenic to humans (Group 1). Studies in laboratory rats indicate no fertility or developmental effects at inhalation exposures up to 16000 ppm. The potential for reproductive and developmental toxicity exists in humans from deliberate consumption of ethanol. Additional severe acute and chronic effects can be expected with ethanol overconsumption, however, ingestion is not expected to be a significant route of exposure in an occupational setting.

Trimethylbenzene

Trimethylbenzenes are a commercially available mixture of three separate isomers: 1,2,3-, 1,2,4-, 1,3,5-trimethylbenzene. Overexposure to trimethylbenzenes is known to result in irritation of the eyes, skin, and respiratory tract in humans and animals. Acute (short-term) and chronic (long-term) inhalation exposure to high enough levels of trimethylbenzenes has been shown to result in neurological effects in humans and animals. There is limited evidence that overexposure by inhalation of trimethylbenzenes can result in hematological effects such as alterations in blood clotting and anemia in humans. Animal studies have also found evidence that inhalation exposure to trimethylbenzenes can result in hematological effects. No human studies have investigated the reproductive or developmental effects of trimethylbenzenes. Reproductive and developmental effects in animals exposed to trimethylbenzene has been reported.

Pentane

Pentane may be fatal if it is swallowed and enters the airway. If inhaled, short-term (acute) overexposure can cause drowsiness, disorientation, other narcotic effects, and possibly death. Acute exposure to n-pentane by inhalation and ingestion results in low toxicity in animal studies. Exposure can cause irritation to eyes, skin (including dermatitis), and nose. Sensitization has not been reported. Exposure to high enough levels may also affect the central nervous system (CNS).

Naphthalene

Acute (short term) exposure to large amounts of naphthalene may damage or destroy red

blood cells, a condition termed hemolytic anemia. Symptoms of hemolytic anemia include fatigue, lack of appetite, restlessness, and pale skin. Acute inhalation or oral exposure to large amounts of naphthalene may also cause nausea, vomiting, diarrhea, blood in the urine, and a yellow color to the skin. Ingestion may result in death. Chronic (long term) exposure in rats and mice can lead to irritation and inflammation of their nose and lungs; nasal hyperplasia and metaplasia in respiratory and olfactory epithelium has been reported in studies in mice. Exposure to high enough levels may have effects on the blood, resulting in chronic hemolytic anemia, and effects on the eyes, resulting in the development of cataracts. Cancer from naphthalene exposure has been observed in animals, but not humans. IARC has classified naphthalene as possibly carcinogenic to humans (Group 2B), and the ECHA C&L Inventory reports that naphthalene is suspected of causing cancer (Carc. 2).

Ethylbenzene

Ethylbenzene may be fatal if it is swallowed and enters the airways. Short term (acute) exposure to ethylbenzene can cause eye, skin, and throat irritation. It may have effects on the central nervous system including dizziness, and at very high exposure, lowering on consciousness. Long-term exposures orally and by inhalation have been shown to cause damage to the inner ear and hearing in animals. Long term or repeated exposure to high enough levels of ethylbenzene may have effects on the kidneys and liver, resulting in impaired functions, and repeated contact with skin may cause dryness and cracking. Animal studies indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland. In a 2-year inhalation study in mice and rats, the animals were exposed to 0, 75, 250, and 750 ppm ethylbenzene 6 hours/day, 5 days/week. Renal effects were observed in male rats (renal tubule hyperplasia) and female rats (renal tubule adenoma and adenoma or carcinoma) exposed to 750 ppm. The incidence of adenoma in the testes of males was significantly greater than in the control group and exceeded the historical control range for inhalation studies. The incidences of alveolar/bronchiolar adenoma was increased in males and the incidence of hepatocellular adenoma was increased in females. IARC has classified ethylbenzene as possibly carcinogenic to humans (Group 2B). Studies do not provide conclusive evidence of reproductive effects. In one study, developmental effects were reported in animals but only at very high doses (≥ 1000 ppm) that are likely to be toxic to the mother. The relevance of these findings to humans is not clear at this time.

Cyclohexane

Cyclohexane may be fatal if it is swallowed and enters the airways. Cyclohexane has low acute oral, dermal, and inhalation toxicity. Acute (short-term) overexposure can irritate and burn the eyes, irritate the nose and throat, and cause coughing, wheezing, headache, dizziness, nausea, vomiting, lightheadedness, drowsiness, and unconsciousness at high concentrations. Chronic inhalation exposure caused maternal toxicity and developmental effects in rats. At high enough levels, repeated or prolonged contact with skin may cause dermatitis.

Benzene

Benzene exposure may occur through inhalation, ingestion, skin absorption or eye contact. Benzene exposure can cause skin, eye and respiratory irritation. The most characteristic systemic effect resulting from high enough intermediate and chronic benzene exposure is arrested development of blood cells. Studies have linked overexposure to benzene to many hematological effects including aplastic anemia, pancytopenia, leukopenia, and myelodysplastic syndrome. In vivo and in vitro data from both humans and animals show that benzene and/or its metabolites are genotoxic. Studies in animals provide supporting evidence for the carcinogenicity of inhaled benzene. Epidemiological studies have reported a causal relationship between occupational benzene exposures and acute myelogenous leukemia. Some studies suggest associations between benzene exposure and non-Hodgkin's lymphoma, multiple myeloma, and other cancers. Benzene has been classified as carcinogenic to humans (Group 1) by IARC, and the ECHA C&L Inventory states it may cause cancer (Carc. 1B). IARC concluded that benzene causes acute myeloid leukemia and a positive association has been observed for acute lymphatic leukemia, chronic lymphatic leukemia, non-hodgkin lymphoma, and multiple myeloma. Human studies suggest that female fertility and menstrual cycles were effected by benzene exposure; however, due to uncertainties in exposure and limited data the studies were considered inconclusive. Developmental effects have been observed in animals including persistent hematopoietic anomalies. It has been suggested that the reported benzene fetotoxicity of decreased weight and skeletal variants is a function of maternal toxicity.

N-hexane

N-Hexane may be fatal if it is swallowed and enters the airways. Acute (short-term) dermal overexposure can cause skin and eye irritation in humans. Acute inhalation and oral

exposures have caused systemic effects such as decreased body weight and respiratory effects, as well as reproductive and developmental effects in animals. Respiratory effects may include nose, throat, and lung irritation, coughing, wheezing, and shortness of breath. Acute overexposures may also cause headache, nausea, vomiting, dizziness, lightheadedness, loss of consciousness, coma, and death in human. Intermediate duration inhalation and oral exposures to relatively high concentrations (400-3,000 ppm) of n-hexane have led to nerve damage, paralysis, and/or deaths in rats. N-hexane may damage male reproductive glands. Intermediate-duration inhalation and oral exposure to high levels (1,000-10,000 ppm; 4,000 mg/kg/day) of n-hexane damages sperm-forming cells and testicles in rats. Chronic (long-term) inhalation of large amounts of n-hexane causes nerve damage and paralysis of the arms and legs in humans. Dermal effects, such as a skin rash, dryness, or redness can also occur following chronic overexposure. Chronic duration inhalation exposures in animals are not available.

Health hazard and classification information

- Skin Corrosion/Irritation Category** Classification based on data available for ingredients. Irritating to skin.
- Serious eye damage/eye irritation** No information available.
No information available.
- Germ cell mutagenicity** Classification based on data available for ingredients. Contains a known or suspected mutagen. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.
- Carcinogenicity** Classification based on data available for ingredients. Contains a known or suspected carcinogen.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Gasoline 86290-81-5	A3***	Group 2B***	-	X***
Xylene 1330-20-7	-	Group 3***	-	-
Toluene 108-88-3	-	Group 3***	-	-
Ethanol; Ethyl alcohol 64-17-5	A3***	Group 1***	Known***	X***
Naphthalene 91-20-3	A3***	Group 2B***	Reasonably Anticipated***	X***
Ethylbenzene 100-41-4	A3***	Group 2B***	-	X***
Benzene 71-43-2	A1***	Group 1***	Known***	X***

- Reproductive toxicity** Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.
- Target Organ Systemic Toxicant - Single Exposure** May cause drowsiness or dizziness by inhalation.
- Target Organ Systemic Toxicant - Repeated Exposure** Causes damage to organs through prolonged or repeated exposure.
- Target organ effects** liver, kidney, Respiratory system, Eyes, Skin, Central nervous system, blood, bone marrow, Reproductive System.
- Aspiration hazard** May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Additional Ecological Information Release of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number to the U.S. Coast Guard National Response Center is (800) 424-8802

Ecotoxicity Toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Gasoline 86290-81-5	56: 72 h Pseudokirchneriella subcapitata mg/L EC50***	82: 96 h Cyprinodon variegatus mg/L LC50 static 119: 96 h Alburnus alburnus mg/L LC50 static***	-	170: 24 h Daphnia magna mg/L EC50***
Xylene 1330-20-7	-	13.4: 96 h Pimephales promelas mg/L LC50 flow-through 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 19: 96 h Lepomis macrochirus mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static***	-	0.6: 48 h Gammarus lacustris mg/L LC50 3.82: 48 h water flea mg/L EC50***
Toluene 108-88-3	12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 433: 96 h Pseudokirchneriella subcapitata mg/L EC50***	12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 54: 96 h Oryzias latipes mg/L LC50 static***	-	11.5: 48 h Daphnia magna mg/L EC50 5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static***

Ethanol; Ethyl alcohol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through***	-	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50***
Trimethylbenzene 25551-13-7	-	7.72: 96 h Pimephales promelas mg/L LC50 flow-through***	-	-
Pentane 109-66-0	-	9.99: 96 h Lepomis macrochirus mg/L LC50 9.87: 96 h Oncorhynchus mykiss mg/L LC50 11.59: 96 h Pimephales promelas mg/L LC50***	-	9.74: 48 h Daphnia magna mg/L EC50***
Naphthalene 91-20-3	0.4: 72 h Skeletonema costatum mg/L EC50***	5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 31.0265: 96 h Lepomis macrochirus mg/L LC50 static 0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.99: 96 h Pimephales promelas mg/L LC50 static***	-	1.96: 48 h Daphnia magna mg/L EC50 Flow through 1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static 2.16: 48 h Daphnia magna mg/L LC50***
Isopentane 78-78-4	-	-	-	2.3: 48 h Daphnia magna mg/L EC50***
Ethylbenzene 100-41-4	438: 96 h Pseudokirchneriella subcapitata mg/L EC50 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static***	4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 9.6: 96 h Poecilia reticulata mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static***	-	1.8 - 2.4: 48 h Daphnia magna mg/L EC50***
Cyclohexane 110-82-7	500: 72 h Desmodesmus subspicatus mg/L EC50***	3.96 - 5.18: 96 h Pimephales promelas mg/L LC50 flow-through 23.03 - 42.07: 96 h Pimephales promelas mg/L LC50 static 24.99 - 44.69: 96 h Lepomis macrochirus mg/L LC50 static 48.87 - 68.76: 96 h Poecilia reticulata mg/L LC50 static***	-	400: 24 h Daphnia magna mg/L EC50***
Benzene 71-43-2	29: 72 h Pseudokirchneriella subcapitata mg/L EC50***	10.7 - 14.7: 96 h Pimephales promelas mg/L LC50 flow-through 5.3: 96 h Oncorhynchus mykiss mg/L LC50	-	10: 48 h Daphnia magna mg/L EC50 8.76 - 15.6: 48 h Daphnia magna mg/L EC50 Static***

		flow-through 22.49: 96 h Lepomis macrochirus mg/L LC50 static 28.6: 96 h Poecilia reticulata mg/L LC50 static 22330 - 41160: 96 h Pimephales promelas µg/L LC50 static 70000 - 142000: 96 h Lepomis macrochirus µg/L LC50 static***		
N-hexane 110-54-3	-	2.1 - 2.98: 96 h Pimephales promelas mg/L LC50 flow-through***	-	1000: 24 h Daphnia magna mg/L EC50***
n-Heptane 142-82-5	-	375.0: 96 h Cichlid fish mg/L LC50***	-	10: 24 h Daphnia magna mg/L EC50***

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical Name	Partition coefficient
Xylene 1330-20-7	2.77 - 3.15***
Toluene 108-88-3	2.7***
Butane 106-97-8	2.89***
Ethanol; Ethyl alcohol 64-17-5	-0.32***
Pentane 109-66-0	3.39***
Naphthalene 91-20-3	3.6***
Isopentane 78-78-4	3.2 - 3.3***
Ethylbenzene 100-41-4	3.2***
Cyclohexane 110-82-7	3.44***
Benzene 71-43-2	2.1***
n-Heptane 142-82-5	4.66***

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

US EPA Waste Number D001, U019 U056 U165 U220 U239

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Xylene 1330-20-7	-	Included in waste stream: F039***	-	U239***
Toluene 108-88-3	U220***	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151***	-	U220***
Naphthalene 91-20-3	U165***	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145***	-	U165***
Ethylbenzene 100-41-4	-	Included in waste stream: F039***	-	-
Cyclohexane 110-82-7	-	-	-	U056***
Benzene 71-43-2	U019***	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143, K144, K145, K147, K151, K159, K169, K171, K172***	0.5 mg/L regulatory level***	U019***

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene 108-88-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.***	-
Naphthalene 91-20-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and	-

			positions of chlorine substitution.***	
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California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Gasoline 86290-81-5	Ignitable***
Xylene 1330-20-7	Toxic Ignitable***
Toluene 108-88-3	Toxic Ignitable***
Ethanol; Ethyl alcohol 64-17-5	Toxic Ignitable***
Pentane 109-66-0	Toxic Ignitable***
Naphthalene 91-20-3	Toxic***
Isopentane 78-78-4	Ignitable Toxic***
Ethylbenzene 100-41-4	Toxic Ignitable***
Cyclohexane 110-82-7	Toxic Ignitable***
Benzene 71-43-2	Toxic Ignitable***
N-hexane 110-54-3	Toxic Ignitable***
n-Heptane 142-82-5	Toxic Ignitable***

14. TRANSPORT INFORMATION

DOT

UN/ID no UN1203
Proper Shipping Name gasoline
Hazard Class 3
Packing group II
Reportable Quantity (RQ) (Toluene: RQ (kg)= 454.00, Xylenes (mixed isomers): RQ (kg)= 45.40, Naphthalene: RQ (kg)= 45.40, Benzene: RQ (kg)= 4.54, Cyclohexane: RQ (kg)= 454.00, Ethylbenzene: RQ (kg)= 454.00)
Special Provisions 144, 177, B1, B33, IB2, T8, T4
Description UN1203, GASOLINE (TOLUENE, PENTANE), 3, II, Marine pollutant
Emergency Response Guide Number 128

TDG

UN/ID no UN1203
Proper Shipping Name gasoline
Hazard Class 3
Packing group II
Description UN1203, GASOLINE (TOLUENE, PENTANE), 3, II, Marine pollutant

MEX

UN/ID no UN1203
Proper Shipping Name gasoline
Hazard Class 3
Special Provisions 243
Packing group II

Description UN1203, GASOLINE, 3, II

IATA

UN/ID no UN1203
 Proper Shipping Name gasoline
 Hazard Class 3
 Packing group II
 ERG Code 3H
 Description UN1203, GASOLINE, 3, II

IMDG

UN/ID no UN1203
 Proper Shipping Name gasoline
 Hazard Class 3
 Packing group II
 EmS No. F-E, S-E
 Special Provisions 243, 363
 Description UN1203, GASOLINE, 3, II, (-21°C C.C.), Marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA Not Listed
 DSL/NDL Listed
 ENCS Not Listed
 IECS Not Listed
 KECL Listed
 PICCS Listed
 AICS Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
 ENCS - Japan Existing and New Chemical Substances
 IECS - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard Yes
 Chronic Health Hazard Yes
 Fire hazard Yes
 Sudden release of pressure hazard No
 Reactive Hazard No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylene 1330-20-7	100 lb***	-	-	X***
Toluene 108-88-3	1000 lb***	X***	X***	X***

Naphthalene 91-20-3	100 lb***	X***	X***	X***
Ethylbenzene 100-41-4	1000 lb***	X***	X***	X***
Cyclohexane 110-82-7	1000 lb***	-	-	X***
Benzene 71-43-2	10 lb***	X***	X***	X***

CERCLA

The CERCLA definition of hazardous substances contains a “petroleum exclusion” clause which exempts crude oil, fractions of crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Toluene - 108-88-3	Developmental***
Ethanol; Ethyl alcohol - 64-17-5	Carcinogen Developmental***
Ethylbenzene - 100-41-4	Carcinogen***
Naphthalene - 91-20-3	Carcinogen***
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive***

U.S. State Right-to-Know Regulations

US State Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Toluene 108-88-3	X***	X***	X***
Xylene 1330-20-7	-	-	X***
Gasoline, natural; Low boiling point naphtha 8006-61-9	-	X***	-
Butane 106-97-8	X***	X***	X***
Ethanol; Ethyl alcohol 64-17-5	X***	X***	X***
Naphthalene 91-20-3	X***	X***	X***
Isopentane 78-78-4	X***	X***	X***
Ethylbenzene 100-41-4	X***	X***	X***
Pentane 109-66-0	X***	X***	X***
Cyclohexane 110-82-7	X***	X***	X***
Trimethylbenzene 25551-13-7	X***	X***	X***
Benzene 71-43-2	X***	X***	X***
n-Heptane 142-82-5	X***	X***	X***

N-hexane 110-54-3	X***	X***	X***
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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Revision Date 02-Aug-2017
Revision Note No information available.

Disclaimer

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19, 21, 26, 85, 91, 338, 340, 1182, 1183, 1184, 1195, 1196, 1197, 1247, 1248, 1249, 1251, 1252, 1253, 1273, 1274, 1342, 1343, 1357, 1358, 1359, 1455, 1456, 1457, 1462, 1477, 1655, 1657, 1658, 1690, 1703, 1704, 1706, 1721, 1736, 1737, 1739, 1771, 1775, 1776, 1791, 1810, 1811, 1812, 1813, 1820, 1890, 1960

End of Safety Data Sheet