



# SAFETY DATA SHEET

Issuing Date No data available

Revision Date 31-Dec-2016

Revision Number 1

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

### Product identifier

**Product Name** 260 GT Plus with Ethanol

### Other means of identification

**Product Code(s)** 135300

**UN/ID no.** 3475

**Synonyms** Oxygenated unleaded racing gasoline

### Recommended use of the chemical and restrictions on use

**Recommended Use** Liquid: automotive refuelling. California Air Resources Board (CARB): This product cannot be sold, offered for sale, supplied or offered for supply for motor vehicles in California except in competition racing vehicles. Not Legal For Use in Any Other Motor Vehicle.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Supplier Address

Sunoco LP  
3801 West Chester Pike  
Newtown Square Pennsylvania 19073  
Sunoco Race Fuels email: performanceproducts@sunoco.com  
<http://www.Sunocoracefuels.com>

### Emergency telephone number

**Company Phone Number** Product Safety Information 1-888-567-3066  
Email sunocomsds@sunoco.com

**24 Hour Emergency Phone Number** Sunoco LP: (800) 964-8861

**Emergency Telephone** Chemtrec 1-800-424-9300 24 Hour Emergency Phone Number

## 2. HAZARDS IDENTIFICATION

### Classification

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

Skin corrosion/irritation	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 2

**Label elements****Danger****Hazard statements**

Causes skin irritation

Suspected of damaging fertility or the unborn child

May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure (central nervous system, liver, kidney, respiratory system and cardiovascular system)

May be fatal if swallowed and enters airways

Highly flammable liquid and vapor

**Appearance** Clear Liquid**Physical state** liquid**Odor** Gasoline**Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use spark-proof tools and explosion-proof equipment

Take precautionary measures against static discharge

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

IF skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction**Precautionary Statements - Storage**

Store locked up

Store in a well-ventilated place.

Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

static accumulator

Vapors may form explosive mixture with air

**Other Information**

EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE

**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Not applicable.

#### Mixture

#### Synonyms

Oxygenated unleaded racing gasoline.

Chemical name	CAS No.	Weight-%	Trade secret
Isooctane	540-84-1	30-50	*
Toluene	108-88-3	30-40	*
Isopentane	78-78-4	10-20	*
Ethyl alcohol	64-17-5	11-15	*
Xylene	1330-20-7	.01-0.013	*
Hexane	110-54-3	0.001-0.01	*
Ethylbenzene	100-41-4	0.001-0.01	*
Benzene	71-43-2	0.002-0.01	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Description of first aid measures

#### **Inhalation**

Remove to fresh air. Give artificial respiration if victim is not breathing. If breathing is difficult, administer oxygen. Get immediate medical advice/attention.

#### **Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

#### **Skin contact**

Wash skin with soap and water for 20 minutes. Remove and isolate contaminated clothing and shoes. Get immediate medical advice/attention. Injection injuries may not appear serious at first but within a few hours, without proper treatment, the area will become swollen, discolored and extremely painful. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss. Wash contaminated clothing before reuse.

#### **Ingestion**

If swallowed, call a poison control center or physician immediately. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. Do NOT induce vomiting.

#### Most important symptoms and effects, both acute and delayed

#### **Symptoms**

Causes headache, drowsiness or other effects to the central nervous system. Dizziness. Disorientation. Aspiration can cause nausea and vomiting.

#### Indication of any immediate medical attention and special treatment needed

#### **Note to physicians**

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. Aspiration hazard if swallowed. Can enter lungs and cause damage.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	In case of fire: Use CO2, dry chemical, or foam for extinction. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire, cool tanks with water spray.
<b>Unsuitable extinguishing media</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. Vapors can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. static accumulator. Vapors can form explosive mixtures with air. May be ignited by friction, heat, sparks or flames.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing vapors or mists. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Use clean non-sparking tools to collect absorbed material.

**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** Avoid breathing dust/fume/gas/mist/vapors/spray. Use only with adequate ventilation. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Do not siphon by mouth. Static charges can accumulate during shipping, unloading, pouring or conveying. 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. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or

reduction of transfer velocities. Always keep the nozzle in contact with the container throughout the loading process. Do not fill any portable containers in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e. loading this material in tanks or shipping compartments that previously contained middle distillates or similar products). Non-equilibrium conditions may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigating efforts, including bonding and grounding. Empty containers may contain product residue. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Dispose of empty containers and wastes safely.

#### **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). Dispose of empty containers and wastes safely. NFPA Class 1B Storage.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control parameters**

##### **Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isooctane 540-84-1	TWA: 300 ppm	-	-
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>
Isopentane 78-78-4	TWA: 1000 ppm	-	-
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Xylene 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	-
Hexane 110-54-3	TWA: 50 ppm	TWA: 500 ppm TWA: 1800 mg/m <sup>3</sup>	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m <sup>3</sup>
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m <sup>3</sup> STEL: 125 ppm STEL: 545 mg/m <sup>3</sup>
Benzene 71-43-2	STEL: 2.5 ppm TWA: 0.5 ppm	TWA: 10 ppm applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028 TWA: 1 ppm Ceiling: 25 ppm STEL: 5 ppm see 29 CFR 1910.1028	IDLH: 500 ppm TWA: 0.1 ppm STEL: 1 ppm

#### **Appropriate engineering controls**

##### **Engineering controls**

Ensure that eyewash stations and safety showers are close to the workstation location.

Handle product only in closed system or provide appropriate exhaust ventilation. Use with local exhaust ventilation. Use explosion-proof ventilating equipment.

#### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Face protection shield.
<b>Hand Protection</b>	Wear suitable gloves. Break though time: >8 hours. Nitrile rubber. Viton™. Teflon.
<b>Skin and body protection</b>	If there is a risk of contact: Impervious clothing. Protective shoes or boots. Nitrile rubber. Viton™. Teflon.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Half-mask air purifying respirator with organic vapor cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with organic vapor cartridges is acceptable for exposures to fifty (50) times the exposure limit. Exposure should not exceed the cartridge limit of 1000 ppm. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	liquid
<b>Appearance</b>	Clear Liquid
<b>Odor</b>	Gasoline
<b>Color</b>	clear
<b>Odor threshold</b>	<1 ppm

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	No data available	Not applicable
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	38 - 127 °C / 100 - 260 °F	ASTM D 86
<b>Flash point</b>	-40 °C / -40 °F	Reference value
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		Reference value
<b>Upper flammability limit:</b>	7.6	
<b>Lower flammability limit:</b>	1.5	
<b>Vapor pressure</b>	5-16 psia	Reference value
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	0.76	ASTM D 287
<b>Water solubility</b>	NIL - 15%	Reference value
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient</b>	2 - 7	Reference value
<b>Autoignition temperature</b>	280 °C / 536 °F	Reference value
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

#### **Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available

VOC Content (%)	100% (Reference value)
Liquid Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Vapors can form explosive mixtures with air.
<b>Incompatible materials</b>	Strong oxidizing agents, strong acids, and strong bases. Halogens. Halogenated compounds. Peroxides. Chlorine.
<b>Hazardous decomposition products</b>	Carbon monoxide. Carbon dioxide (CO <sub>2</sub> ). Asphyxiants.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

### Information on toxicological effects

<b>Symptoms</b>	Causes headache, drowsiness or other effects to the central nervous system. Dizziness. Disorientation. Skin irritation. Erythema (skin redness). Aspiration can cause 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)	4,293.00
ATEmix (dermal)	4,367.00
ATEmix (inhalation-dust/mist)	17.00

**Unknown acute toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isooctane 540-84-1	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 14.38 mg/L ( Rat ) 4 h
Toluene 108-88-3	= 2600 mg/kg ( Rat )	= 12000 mg/kg ( Rabbit )	= 12.5 mg/L ( Rat ) 4 h
Isopentane 78-78-4	-	-	= 280000 mg/m <sup>3</sup> ( Rat ) 4 h
Ethyl alcohol	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

64-17-5			
Xylene 1330-20-7	= 3500 mg/kg ( Rat )	> 4350 mg/kg ( Rabbit ) > 1700 mg/kg ( Rabbit )	= 29.08 mg/L ( Rat ) 4 h = 5000 ppm ( Rat ) 4 h
Hexane 110-54-3	= 25 g/kg ( Rat )	= 3000 mg/kg ( Rabbit )	= 48000 ppm ( Rat ) 4 h
Ethylbenzene 100-41-4	= 3500 mg/kg ( Rat )	= 15400 mg/kg ( Rabbit )	= 17.4 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

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

#### **Skin corrosion/irritation**

Samples of gasoline and a number of low boiling point naphtha streams have been tested in rabbit skin irritation studies. The majority of the data were derived using a 24 hour occluded exposure protocol. The degree of dermal irritation observed was variable, ranging from slight to moderate/severe, normally persisting for up to 14 days. There was no evidence of skin corrosion. Heavier, aromatic materials caused more irritation than lighter, paraffinic streams (API, 1995).

#### **Serious eye damage/eye irritation**

The effects of gasoline and low boiling point naphtha streams on the eye have been investigated in rabbits using a number of samples. None of the samples tested showed more than minimal redness and swelling, which resolved quickly (ARCO, 1986-A).

#### **Respiratory or skin sensitization**

Tests in guinea pigs with gasoline and a number of low boiling point naphtha streams showed no evidence of skin sensitization (ARCO, 1986-B). There are no reports available to indicate that gasoline or low boiling point naphthas have the potential to cause respiratory sensitization.

#### **Germ cell mutagenicity**

The mutagenic potential of gasoline and low boiling point naphthas has been extensively studied in a range of in vivo and in vitro assays. The majority of the studies showed no evidence of mutagenic activity (API, 1977; API, 2005). The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). This note applies only to certain complex coal- and oil-derived substances in Part 3.

#### **Carcinogenicity**

The carcinogenic potential of gasoline has been investigated in rats and mice following inhalation exposure for 2 years. In rats, there was an increased incidence of kidney tumors in males and in mice there was an increased incidence of liver tumors in females; further work has shown that these tumors are sex and species specific and are not considered relevant to humans (Short BG et al., 1989). Results of 2 year skin painting studies with gasoline or low boiling point naphthas have shown either no, or weak potential (low incidence and long latent period) for the development of skin tumors. Additional work has shown that where tumors arise they are most likely a result of a non-genotoxic response due to dermal irritation (API, 1983).

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3	-	Group 3	-	-
Xylene 1330-20-7	-	Group 3	-	-
Ethylbenzene 100-41-4	A3	Group 2B	-	X
Benzene 71-43-2	A1	Group 1	Known	X

#### **Reproductive toxicity**

Results of guideline developmental toxicity studies on gasolines and OECD developmental toxicity screening studies with low boiling point naphtha streams showed no evidence of developmental toxicity in rats (Roberts L et al, 2001). Similarly, studies in rats with gasoline did not show any effect on reproductive performance (McKee RH et al, 2000). Gasoline and low boiling point naphthas can contain amounts of toluene and/or n-hexane, constituents that are classified as reprotoxicants.

#### **STOT - single exposure**

Acute exposure studies show no evidence of systemic toxicity, other than a potential to



cause narcosis/CNS depression at higher exposure concentrations (Drinker P et al, 1943; Davis A et al 1960).

**STOT - repeated exposure**

The repeat dose toxicity of gasoline and low boiling point naphthas has been studied in rats following dermal and inhalation exposure for periods between 10 days and up to 2 years. The effects of repeated inhalation exposure of primates to gasoline have also been studied. In dermal studies, no systemic toxicity has been seen; the only effect observed was moderate to severe dermal irritation. Repeated inhalation exposure causes light hydrocarbon nephropathy in male rats, an effect which is considered to be both sex and species specific. (Halder CA et al, 1985; API, 2005; ARCO, 1986-C).

**Aspiration hazard**

Gasoline and low boiling point naphthas are low viscosity, mobile hydrocarbon liquids with a viscosity at 40°C of < 7 mm<sup>2</sup>/s.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Not determined.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Toluene 108-88-3	433: 96 h Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 54: 96 h Oryzias latipes mg/L LC50 static 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 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 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	EC50 = 19.7 mg/L 30 min	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50
Isopentane 78-78-4	-	-	-	2.3: 48 h Daphnia magna mg/L EC50
Ethyl alcohol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static
Xylene 1330-20-7	-	13.4: 96 h Pimephales promelas mg/L LC50 flow-through 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 7.711 - 9.591: 96 h	EC50 = 0.0084 mg/L 24 h	0.6: 48 h Gammarus lacustris mg/L LC50 3.82: 48 h water flea mg/L EC50

		Lepomis macrochirus mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 19: 96 h Lepomis macrochirus mg/L LC50		
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
Ethylbenzene 100-41-4	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 438: 96 h Pseudokirchneriella subcapitata mg/L EC50	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 32: 96 h Lepomis macrochirus mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	1.8 - 2.4: 48 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 flow-through 28.6: 96 h Poecilia reticulata mg/L LC50 static 22.49: 96 h Lepomis macrochirus mg/L LC50 static 22330 - 41160: 96 h Pimephales promelas µg/L LC50 static 70000 - 142000: 96 h Lepomis macrochirus µg/L LC50 static	-	8.76 - 15.6: 48 h Daphnia magna mg/L EC50 Static 10: 48 h Daphnia magna mg/L EC50

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

Chemical name	Partition coefficient
Toluene 108-88-3	2.7
Isopentane 78-78-4	3.2 - 3.3
Ethyl alcohol 64-17-5	-0.32
Xylene 1330-20-7	2.77 - 3.15

Ethylbenzene 100-41-4	3.2
Benzene 71-43-2	2.1

**Other adverse effects** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Toluene 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	-	U220
Xylene 1330-20-7	-	Included in waste stream: F039	-	U239
Ethylbenzene 100-41-4	-	Included in waste stream: F039	-	-
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.	-

Chemical name	California Hazardous Waste Status
Isooctane 540-84-1	Toxic Ignitable

Toluene 108-88-3	Toxic Ignitable
Isopentane 78-78-4	Ignitable Toxic
Ethyl alcohol 64-17-5	Toxic Ignitable
Xylene 1330-20-7	Toxic Ignitable
Hexane 110-54-3	Toxic Ignitable
Ethylbenzene 100-41-4	Toxic Ignitable
Benzene 71-43-2	Toxic Ignitable

## 14. TRANSPORT INFORMATION

<b>DOT</b>	Regulated
UN/ID no.	3475
Proper shipping name	Ethanol and gasoline mixture
Hazard Class	3
Packing Group	II
Reportable Quantity (RQ)	Toluene RQ: 1000 lbs (454 kg); Benzene RQ: 10 lbs (4.54 kg); Xylene RQ: 100 lbs (45.4 kg); Hexane RQ: 5000 lbs (2270 kg); Ethyl benzene RQ: 1000 lbs (454 kg); Isooctane RQ: 1000 lbs (454 kg)
Special Provisions	144, 177, IB2, T4, TP1
<b>TDG</b>	Regulated
UN/ID no.	3475
Proper shipping name	Ethanol and gasoline mixture
Hazard Class	3
Packing Group	II
<b>IATA</b>	Regulated
UN/ID no.	3475
Proper shipping name	Ethanol and gasoline mixture
Hazard Class	3
Packing Group	II
ERG Code	3L
Special Provisions	A156
<b>IMDG</b>	Regulated
UN/ID no.	3475
Proper shipping name	ETHANOL AND GASOLINE MIXTURE
Hazard Class	3
Packing Group	II
EmS-No.	F-E, S-E
Special Provisions	333, 363
<b>RID</b>	Regulated
UN/ID no.	3475
Proper shipping name	Ethanol and gasoline mixture
Hazard Class	3
Packing Group	II
<b>ADR</b>	Regulated
UN/ID no.	3475
Proper shipping name	ETHANOL AND GASOLINE MIXTURE

**Hazard Class** 3  
**Packing Group** II

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - 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 does not contain any substances regulated as 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
Toluene 108-88-3	1000 lb	X	X	X
Xylene 1330-20-7	100 lb	-	-	X
Ethylbenzene 100-41-4	1000 lb	X	X	X
Benzene 71-43-2	10 lb	X	X	X

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Isooctane	1000 lb	-	RQ 1000 lb final RQ

540-84-1			RQ 454 kg final RQ
Toluene 108-88-3	1000 lb 1 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ
Xylene 1330-20-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Hexane 110-54-3	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethylbenzene 100-41-4	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
Benzene 71-43-2	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Toluene - 108-88-3	Developmental
Ethyl alcohol - 64-17-5	Carcinogen Developmental
Ethylbenzene - 100-41-4	Carcinogen
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Isooctane 540-84-1	X	X	X
Toluene 108-88-3	X	X	X
Isopentane 78-78-4	X	X	X
Ethyl alcohol 64-17-5	X	X	X
Xylene 1330-20-7	X	X	X
Hexane 110-54-3	X	X	X
Ethylbenzene 100-41-4	X	X	X
Benzene 71-43-2	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 1	Flammability 3	Instability 0	Physical and chemical properties -
<b>HMIS</b>	Health hazards 2*	Flammability 3	Physical hazards 0	Personal protection X
<b>Revision Date</b>	31-Dec-2016			

Revision Note No information available.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Reference Sources for Section 11**

API (1977) Mutagenicity evaluation of unleaded gasoline. Study conducted by Litton Bionetics. API Med. Res. Publ. 28-30173. Washington DC: American Petroleum Institute.

API (1983) Carcinogenic potential of key petroleum products. Study conducted by Eppley Institute for Research in Cancer, University of Nebraska Medical School. API Med. Res. Publ. 30-31646. Washington DC: American Petroleum Institute.

API (1995) Primary skin irritation study in rabbits of API 91-01 and PS-6. Unleaded test gasolines. Study conducted by Hill Top Biolabs Inc. API Toxicology Report No. 409. Washington DC: American Petroleum Institute.

API (2005) Baseline gasoline vapor condensate: a 13-week whole-body inhalation toxicity study in rats with neurotoxicity assessments and 4-week in vivo genotoxicity and immunotoxicity assessments. Study conducted by Huntingdon Life Sciences. Study No. 00-6125. Washington DC: American Petroleum Institute.

ARCO (1986-A) Primary eye irritation study in rabbits administered test article F-64-01 unleaded Watson premium gasoline. UBTL Study No. 60583. Los Angeles CA: ARCO.

ARCO (1986-B) Dermal sensitization study in guinea pigs administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60613. Los Angeles CA: ARCO.

ARCO (1986-C) Twenty-eight (28) day dermal toxicity study in rats on test article F-64-01 unleaded Watson premium gasoline. UBTL Study No. 60761. Los Angeles CA: ARCO.

Davis, A. et al (1960) The effects on human volunteers of exposure to air containing gasoline vapor. Arch Environ Health 1, 548-554.

Drinker, P. et al (1943) The threshold toxicity of gasoline vapor. J Ind Hyg Toxicol 25, 6, 225-232.

Halder, C.A. et al (1985) Hydrocarbon nephropathy in male rats: identification of the nephrotoxic components of unleaded gasoline. Toxicol Ind Health 1, 3, 67-87.

McKee, R.H. et al (2000) Assessment in rats of the reproductive toxicity of gasoline from a gasoline vapor recovery unit. Reprod Toxicol 14, 4, 337-353.

Roberts, L. et al (2001) Developmental toxicity evaluation of unleaded gasoline vapor in the rat. Reprod Toxicol 15, 5, 487-494.

Short, B.G. et al (1989) Promoting effects of unleaded gasoline and 2,2,4-trimethylpentane on the development of atypical cell foci and renal tubular cell tumors in rats exposed to N-ethyl-N-hydroxy-ethylnitrosamine. Cancer Research 49, 22, 6369-6378.

**End of Safety Data Sheet**

