

SAFETY DATA SHEET

Issuing Date No data available

Revision Date 03-Nov-2016

Revision Number 1

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

Product identifier	
Product Name	SUNOCO SR18
Other means of identification	
Product Code(s)	267400
UN/ID no.	1203
Synonyms	Leaded 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 of	data sheet
Supplier Address Sunoco LP 3801 West Chester Pike Newtown Square Pennsylvania 19073 Sunoco Race Fuels email: performance http://www.Sunocoracefuels.com	eproducts@sunoco.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 yellow

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 CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up 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)

static accumulator Vapors may form explosive mixture with air

Other Information

EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

<u>Mixture</u>

Synonyms

Leaded racing gasoline.

Chemical name	CAS No.	Weight-%	Trade secret
Isooctane	26635-64-3	60-90	*
Naphtha (petroleum), light alkylate	64741-66-8	5-15	*
Toluene	108-88-3	5-15	*
N-Butane	106-97-8	1-10	*
Isopentane	78-78-4	5-10	*
Tetraethyl Lead	78-00-2	0.18-0.27	*
Hexane	110-54-3	.0102	*
Ethylbenzene	100-41-4	0.001-0.01	*
Benzene	71-43-2	0.001-0.01	*
Cyclopentane	287-92-3	.001005	*
Xylene	1330-20-7	0.001-0.003	*

*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 effe	ects, both acute and delayed
Symptoms	Causes headache, drowsiness or other effects to the central nervous system. Dizziness. Disorientation. Aspiration can cause nausea and vomitting.
Indication of any immediate medica	al 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

Suitable Extinguishing Media	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.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	No information available.
Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge	None. 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.
Special protective equipment for fire-fighters	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 containm	ent 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 of weld containers. Dispose of empty containers and wastes safely.

Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep 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 26635-64-3	TWA: 300 ppm	-	-
Naphtha (petroleum), light alkylate 64741-66-8	-	-	-
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
N-Butane 106-97-8	STEL: 1000 ppm	-	TWA: 800 ppm TWA: 1900 mg/m ³
Isopentane 78-78-4	TWA: 1000 ppm	-	-
Tetraethyl Lead 78-00-2	8-hr TWA: 0.1 mg/m ³	8-hr TWA: 0.075 mg/m ³	IDLH: 40 mg/m ³ Pb IDLH: 100 mg/m ³ Pb TWA: 0.075 mg/m ³ Pb TWA: 0.050 mg/m ³ Pb
Hexane 110-54-3	TWA: 50 ppm	TWA: 500 ppm TWA: 1800 mg/m ³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m³
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
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	IDLH: 500 ppm TWA: 0.1 ppm STEL: 1 ppm

		1910.1028		
Cyclopentane	TWA: 600 ppm	-	TWA: 600 ppm	
287-92-3			TWA: 1720 mg/m ³	
Xylene	STEL: 150 ppm	TWA: 100 ppm	-	
1330-20-7	TWA: 100 ppm	TWA: 435 mg/m ³		
Other Information	Sunoco derived Time We	ighted Average (TWA) for Alkyla	ate: 100 ppm.	
Appropriate engineering contro	ls			
Engineering controls	Handle product only in clo	ions and safety showers are clososed system or provide appropria Use explosion-proof ventilating e	ate exhaust ventilation. Use with	
Individual protection measures	, such as personal protective	<u>equipment</u>		
Eye/face protection	Wear safety glasses with	Wear safety glasses with side shields (or goggles). Face protection shield.		
Hand Protection	Wear suitable gloves. Bre	Wear suitable gloves. Break though time: >8 hours. Nitrile rubber. Viton™. Teflon.		
Skin and body protection	lf there is a risk of contact Viton™. Teflon.	If there is a risk of contact:. Impervious clothing. Protective shoes or boots. Nitrile rubber. Viton™. Teflon.		
Respiratory protection	respiratory protection sho required for high airborne provided in accordance w organic vapor cartridges i Full-face air purifying resp fifty (50) times the exposu ppm. Protection by air pur	s acceptable for exposures to te	supplied air respirators may be espiratory protection must be f-mask air purifying respirator with n (10) times the exposure limit. ges is acceptable for exposures to ceed the cartridge limit of 1000 a positive pressure-demand	
General hygiene considerations	Handle in accordance with	h good industrial hygiene and sa	afety practice.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and c Physical state Appearance Odor Color Odor threshold	hemical properties liquid yellow Gasoline yellow <1 ppm	
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit:	Values No data available No data available 38 - 127 °C / 100 - 260 °F -40 °C / -40 °F No data available No data available 7.6 1.5	Remarks • Reference value Not applicable None known ASTM D 86 Reference value None known None known Reference value
Vapor pressure Vapor density Relative density Water solubility Solubility in other solvents	5-16 psia No data available 0.76 NIL - 15% No data available	Reference value None known ASTM D 287 Reference value None known

Partition coefficient	
Autoignition temperature	
Decomposition temperature	
Kinematic viscosity	
Dynamic viscosity	
Explosive properties	
Oxidizing properties	

Other Information Softening point Molecular weight VOC Content (%) Liquid Density Bulk density 2 - 7 280 °C / 536 °F No data available No data available No data available No information available No information available

No information available No information available 100% (Reference value) No information available No information available Reference value Reference value None known None known None known

10. STABILITY AND REACTIVITY

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

Hazardous decomposition products Carbon monoxide. Carbon dioxide (CO2). Asphyxiants.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Information on toxicological effects	
Symptoms	Causes headache, drowsiness or other effects to the central nervous system. Dizziness. Disorientation. Skin irritation. Erythema (skin redness). Aspiration can cause nausea and vomitting.
Numerical measures of toxicity	
Acute toxicity	
The following values are calculated ATEmix (oral) ATEmix (dermal) ATEmix (inhalation-dust/mist)	based on chapter 3.1 of the GHS document . 6,122.00 2,245.00 125.00

Unknown acute toxicity 2.2585 % of the mixture consists of ingredient(s) of unknown toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Naphtha (petroleum), light alkylate 64741-66-8	> 7000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 6.31 mg/L (Rat)4 h
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg(Rabbit)	= 12.5 mg/L (Rat)4 h
N-Butane 106-97-8	-	-	= 658 g/m³ (Rat)4 h
Isopentane 78-78-4	-	-	= 280000 mg/m ³ (Rat) 4 h
Tetraethyl Lead 78-00-2	= 12300 µg/kg (Rat) = 12.3 mg/kg (Rat)	= 990 mg/kg (Rabbit)	= 850 mg/m³(Rat)1 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	= 810 mg/kg (Rat) = 1800 mg/kg (Rat)	> 8200 mg/kg (Rabbit)	= 44.66 mg/L (Rat)4 h
Cyclopentane 287-92-3	= 11400 mg/kg (Rat)	-	-
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

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

Skin corrosion/irritation	in rabbit skin occluded exp from slight to evidence of s	asoline and a number of lo irritation studies. The maj- osure protocol. The degre moderate/severe, normally kin corrosion. Heavier, are eams (API, 1995).	ority of the data were deriv ee of dermal irritation obse y persisting for up to 14 da	red using a 24 hour rved was variable, ranging lys. There was no
Serious eye damage/eye	investigated i	f gasoline and low boiling p n rabbits using a number o nimal redness and swelling	of samples. None of the sa	mples tested showed
Respiratory or skin sensi	showed no en to indicate the	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	studied in a r evidence of n mutagen nee benzene (EIN	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	inhalation ex in males and work has sho relevant to hu gasoline or lo incidence and shown that w	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	-	Group 3	-	-

108-88-3				
Tetraethyl Lead 78-00-2	-	Group 3	Reasonably Anticipated	Х
Ethylbenzene 100-41-4	A3	Group 2B	-	Х
Benzene 71-43-2	A1	Group 1	Known	Х
Xylene 1330-20-7	-	Group 3	-	-
Reproductive toxicity	toxicity scre developme did not sho and low boi	eening studies with low bo ntal toxicity in rats (Rober w any effect on reproduct	oxicity studies on gasolines ar iling point naphtha streams sh ts L et al, 2001). Similarly, stu ive performance (McKee RH e ontain amounts of toluene and protoxicants.	nowed no evidence of udies in rats with gasoline et al, 2000). Gasoline
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, 19 Davis A et al 1960).			
STOT - repeated exposure	The repeat dose toxicity of gasoline and low boiling point naphthas has been studied in r 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 studi 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).		lays and up to 2 years. have also been studied. ect observed was e causes light ed to be both sex and	
Aspiration hazard		nd low boiling point naphtl 40°C of < 7 mm2/s.	has are low viscosity, mobile h	nydrocarbon liquids with a

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not determined.

-				-
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Naphtha (petroleum),	30000: 72 h	-	-	2: 48 h Mysidopsis bahia
light alkylate	Pseudokirchneriella			mg/L LC50
64741-66-8	subcapitata mg/L EC50			C
Toluene	433: 96 h	15.22 - 19.05: 96 h	EC50 = 19.7 mg/L 30 min	5.46 - 9.83: 48 h Daphnia
108-88-3	Pseudokirchneriella	Pimephales promelas	<u> </u>	magna mg/L EC50 Static
	subcapitata mg/L EC50	mg/L LC50 flow-through		11.5: 48 h Daphnia
	12.5: 72 h	12.6: 96 h Pimephales		magna mg/L EC50
	Pseudokirchneriella	promelas mg/L LC50		
	subcapitata mg/L EC50	static 54: 96 h Oryzias		
	static	latipes mg/L LC50 static		
		28.2: 96 h Poecilia		
		reticulata mg/L LC50		
		semi-static 5.8: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 semi-static		
		5.89 - 7.81: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 flow-through		
		14.1 - 17.16: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 static 11.0 -		
		15.0: 96 h Lepomis		
		macrochirus mg/L LC50		

	1	1	1	1
		static 50.87 - 70.34: 96 h		
		Poecilia reticulata mg/L		
		LC50 static		
Isopentane 78-78-4	-	-	-	2.3: 48 h Daphnia magna mg/L EC50
Tetraethyl Lead	0.1: 48 h Dunaliella	84: 96 h Lepomis	-	0.085: 48 h Artemia
78-00-2	tertiolecta mg/L EC50	macrochirus mg/L LC50		salina mg/L EC50
		19.3: 96 h Pimephales		
		promelas mg/L LC50		
Hexane	-	2.1 - 2.98: 96 h	-	1000: 24 h Daphnia
110-54-3		Pimephales promelas		magna mg/L EC50
		mg/L LC50 flow-through		
Ethylbenzene	4.6: 72 h	11.0 - 18.0: 96 h	EC50 = 9.68 mg/L 30 min	
100-41-4	Pseudokirchneriella	Oncorhynchus mykiss	EC50 = 96 mg/L 24 h	magna mg/L EC50
	subcapitata mg/L EC50	mg/L LC50 static 7.55 -		
	438: 96 h	11: 96 h Pimephales		
	Pseudokirchneriella	promelas mg/L LC50		
	subcapitata mg/L EC50	flow-through 4.2: 96 h		
	1.7 - 7.6: 96 h	Oncorhynchus mykiss		
	Pseudokirchneriella	mg/L LC50 semi-static		
	subcapitata mg/L EC50	32: 96 h Lepomis		
	static 2.6 - 11.3: 72 h	macrochirus mg/L LC50		
	Pseudokirchneriella	static 9.1 - 15.6: 96 h		
	subcapitata mg/L EC50	Pimephales promelas		
	static	mg/L LC50 static 9.6: 96		
		h Poecilia reticulata mg/L		
		LC50 static		
Benzene	29: 72 h	10.7 - 14.7: 96 h	-	8.76 - 15.6: 48 h Daphnia
71-43-2	Pseudokirchneriella	Pimephales promelas		magna mg/L EC50 Static
	subcapitata mg/L EC50	mg/L LC50 flow-through		10: 48 h Daphnia magna
		22330 - 41160: 96 h		mg/L EC50
		Pimephales promelas		
		µg/L LC50 static 5.3: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 flow-through		
		28.6: 96 h Poecilia		
		reticulata mg/L LC50		
		static 70000 - 142000: 96 h Lepomis macrochirus		
		µg/L LC50 static 22.49:		
		96 h Lepomis		
		macrochirus mg/L LC50		
		static		
Cyclopentane	-	-	-	10.5: 48 h Daphnia
287-92-3				magna mg/L EC50
Xylene	-	13.4: 96 h Pimephales	EC50 = 0.0084 mg/L 24 h	
1330-20-7		promelas mg/L LC50		mg/L EC50 0.6: 48 h
		flow-through 2.661 -		Gammarus lacustris mg/L
		4.093: 96 h		LC50
		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 30.26 - 40.75:		
		96 h Poecilia reticulata		
		mg/L LC50 static 7.711 -		
		9.591: 96 h Lepomis		
		macrochirus mg/L LC50		
		static 13.1 - 16.5: 96 h		
		Lepomis macrochirus		
		mg/L LC50 flow-through	1	1

23.53 - 29.97: 96 h	
Pimephales promelas	
mg/L LC50 static 780: 96	
h Cyprinus carpio mg/L	
LC50 semi-static 780: 96	
h Cyprinus carpio mg/L	
LC50	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical name	Partition coefficient
Toluene 108-88-3	2.7
N-Butane 106-97-8	2.89
Isopentane 78-78-4	3.2 - 3.3
Tetraethyl Lead 78-00-2	4.32
Ethylbenzene 100-41-4	3.2
Benzene 71-43-2	2.1
Cyclopentane 287-92-3	2.05
Xylene 1330-20-7	2.77 - 3.15

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	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
Tetraethyl Lead 78-00-2	P110	-	-	-
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		U019
Xylene 1330-20-7	-	Included in waste stream: F039	-	U239

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.	
Tetraethyl Lead 78-00-2	-	P110	-	-

Chemical name	California Hazardous Waste Status
Isooctane	Toxic
26635-64-3	Ignitable
Toluene	Toxic
108-88-3	Ignitable
Isopentane 78-78-4	Ignitable Toxic
Tetraethyl Lead 78-00-2	Toxic
Hexane	Toxic
110-54-3	Ignitable
Ethylbenzene	Toxic
100-41-4	Ignitable
Benzene	Toxic
71-43-2	Ignitable
Cyclopentane	Toxic
287-92-3	Ignitable
Xylene	Toxic
1330-20-7	Ignitable

14. TRANSPORT INFORMATION

DOT UN/ID no. Proper shipping name Hazard Class Packing Group Reportable Quantity (RQ)	Regulated 1203 Gasoline 3 II Toluene RQ: 1000 lbs (454 kg);Tetraethyl lead RQ: 10 lbs (4.54 kg); Benzene RQ: 10 lbs (4.54 kg); Ethyl benzene RQ; 1000 lbs (454 kg); Hexane RQ: 5000 lbs (2270 kg); Xylene RQ: 100 lbs (45.4 kg)
Special Provisions	144, 177, B1, B33, IB2, T4
TDG	Regulated

UN/ID no.	1203
Proper shipping name	Gasoline
Hazard Class	3
Packing Group	11

IATA	Regulated
UN/ID no.	1203
Proper shipping name	Gasoline
Hazard Class	3
Packing Group	II
ERG Code	3H
Special Provisions	A100
IMDG	Regulated
UN/ID no.	1203
Proper shipping name	Gasoline
Hazard Class	3
Packing Group	II
EmS-No.	F-E, S-E
Special Provisions	243, 363
<u>RID</u>	Regulated
UN/ID no.	1203
Hazard Class	3
Packing Group	II
<u>ADR</u>	Regulated
UN/ID no.	1203
Hazard Class	3
Packing Group	II

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Does not comply

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	Х
Tetraethyl Lead 78-00-2	10 lb	Х	-	Х
Ethylbenzene 100-41-4	1000 lb	Х	Х	Х
Benzene 71-43-2	10 lb	Х	Х	Х
Xylene 1330-20-7	100 lb	-	-	Х

<u>CERCLA</u>

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)
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
Tetraethyl Lead 78-00-2	10 lb	10 lb	RQ 10 lb final RQ RQ 4.54 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
Xylene 1330-20-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 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
Tetraethyl Lead - 78-00-2	Carcinogen
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 26635-64-3	-	-	Х
Toluene 108-88-3	Х	Х	Х
N-Butane 106-97-8	Х	X	Х
Isopentane 78-78-4	Х	Х	Х
Tetraethyl Lead 78-00-2	Х	Х	Х
Hexane 110-54-3	Х	X	Х
Ethylbenzene 100-41-4	Х	X	Х
Benzene 71-43-2	Х	Х	Х
Cyclopentane 287-92-3	Х	Х	Х
Xylene 1330-20-7	Х	X	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

NFPA	Health hazards 1	Flammability 3	Instability 0	Physical and chemical properties -
HMIS	Health hazards 2*	Flammability 3	Physical hazards 0	Personal protection X
		10		

Revision Date 03-Nov-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.

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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