



SAFETY DATA SHEET

1. INFORMATION

Product Name: GASOLINE (REACH Registration number: 01-2119471335-XX-XXXX)

Product Use: Leaded racing gasoline. For use in competition racing vehicles. Not to be used for any other purpose.

Synonyms: Leaded Racing Gasoline, Sunoco Supreme

Manufacturer:

Sunoco, Inc. (R&M)
1735 Market Street LL
Philadelphia, Pennsylvania, 19103-7583
srftch@sunocoinc.com Sunoco Race Fuels Technical Department
http://sunocoinc.com/site/Consumer/RaceFuels/
1-800-722-3427

Emergency Phone Numbers:

Chemtrec (800) 424-9300 (24 hours)
Sunoco Inc. (800) 964-8861 (24 hours)

SDS Information:

Product Safety Information	(888) 567-3066
Email	sunocomsds@sunocoinc.com

2. HAZARDS IDENTIFICATION

2.1 Classification

CLP Classification ((EC) No 1272/2008)

Hazard Class/Category	Hazard Statement
Flammable Liquid 1	H224

Aspiration Toxicity 1	H304
STOT (Single exposure) 3	H336
STOT (Repeated exposure) 2	H373
Skin Irritation 2	H315
Reproductive Toxicity 2	H361df
Aquatic Environment (Chronic) 2	H411

DSD Classification (67/548/EEC)

Symbols: F+, T, N

Indications of Danger: EXTREMELY FLAMMABLE, HARMFUL, DANGEROUS FOR THE ENVIRONMENT

Hazard	Risk Phrase
Flammable	R11
Irritant	R38
Aquatic	R51/53
Repr Cat 2	R62/R63
Harmful	R65
Vapors may cause drowsiness and dizziness	R67

2.2 Label Elements

Hazard Pictograms:



Signal Word:

DANGER

Hazard Statements
H224, H304, H315, H336, H361df, H411

Precautionary Statements

R00000023600, SUNOCO SUPREME

Prevention	Response	Storage	Disposal
P201, P202 P210, P233, P240, P241 P242, P243, P260, P261, P264 P270, P271, P273, P280, P281	P301+P310 P302+P352 P303+P361+P353 P304+P340 P308+P313 P312 P314 P321 P331 P332+P313 P362 P370+P378 P391	P403+233 P405	P501

- EMERGENCY OVERVIEW**

Vapors may cause flash fire or explosion. Static accumulator. May form an ignitable vapor/air mixture.

Hazards Ratings:

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>PPI</u>
NFPA	1	3	0	
HMIS	2	3	0	X

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	EINECS	CAS#	Amount Vol%	Classification
Gasoline	265-068	86290-81-5	99.9 - 100	See Section 2

COMPONENT	EINECS	CAS#	Amount Vol%	Classification
Gasoline, natural	232-349-1	8006-61-9	60 - 85	Asp. Tox 1, Carc 1B, Muta 1B, H304, H350, H340
Toluene	203-625-9	108-88-3	5 - 20	Flam Liq 2, Repr.2 Asp. Tox 1, STOT RE2, Skin Irrit 2, STOT SE3, H225, H361, H304, H373, H315, H336
Isopentane	201-142-8	78-78-4	5 - 10	Flam Liq 1, Asp. Tox 1, STOT SE3, Aquatic Chr 2, H224, H304, H336, H411
n-Butane	203-448-7	106-97-8	5 - 10	Flam Gas 1, H220

NOTE P applies: 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). That is the case for this material.
 NOTE H applies: The classification and labeling shown for this substance applies to the hazardous properties indicated by the hazard statements in combination with the hazard classes and categories shown.

4. FIRST AID MEASURES

- INHALATION**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and continue to monitor. Get immediate medical attention.

- **SKIN**

Immediately flush with large amounts of water for 20 minutes, use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. Get prompt medical 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 clothing before reuse.

- **EYES**

Flush eye with water for 20 minutes. Get medical attention.

- **INGESTION**

If swallowed, immediately contact a physician or Poison Control Center. Never give anything by mouth to an intoxicated, unconscious or convulsing person. Get immediate medical attention. Do not induce vomiting!

NOTE TO PHYSICIAN: Catecholamines and similar adrenergic drugs are generally contraindicated because of potential for increased sensitivity of the heart from hydrocarbon overexposure and subsequent ventricular fibrillation. EKG monitoring may be indicated and bronchodilators should be selected with care.

5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA**

The following media may be used to extinguish a fire involving this material: Alcohol resistant foam.

- **FIRE FIGHTING INSTRUCTIONS**

Use water spray to cool fire exposed tanks and containers. Wear structural fire fighting gear. The use of fresh air equipment such as Self Contained Breathing Apparatus (SCBA) or Supplied Air Respirators should be worn for fire fighting if exposure or potential exposure to products of combustion is expected.

FLAMMABLE PROPERTIES

STATIC ACCUMULATOR. This liquid may form an ignitable vapor-air mixture in closed tanks or containers

6. ACCIDENTAL RELEASE MEASURES

Prevent ignition, stop leak and ventilate the area. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Do not use spark-generating metals for sweeping up spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Vapor can be controlled using a water fog. Water streams should not be directed to the liquid as this will cause the liquid to boil and generate more vapor. Keep personnel upwind from leak. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required.

7. HANDLING AND STORAGE

- **HANDLING**

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Use only in a well-ventilated area. STATIC ACCUMULATOR. This liquid may form an ignitable vapor-air mixture in closed tanks or containers. This liquid may accumulate static electricity even when transferred into properly grounded containers. Bonding and grounding may be insufficient to remove static electricity. Static electricity accumulation may be significantly increased by the presence of small quantities of water. Always bond receiving container to the fill pipe before and during loading, following NFPA-77 and/or API RP 2003 requirements. Automatic gauging devices and other floats in vessels or tanks which contain static accumulating liquids should be electrically bonded to the shell.

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.

Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Never siphon by mouth. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioned, or properly disposed of.

- **STORAGE**

Keep away from heat, sparks, and flame. Keep container closed when not in use. Store in a cool dry place. Consult NFPA and / or OSHA codes for additional information. NFPA class IB storage. Flash point is less than 73 degrees F and boiling point is greater than or equal to 100 degrees F. Outside or detached storage is preferred.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

Substance	Guideline	Short Term Exposure Limit (STEL)	Time Weighted Average (TWA)
Toluene	European Union Occupational Exposure (2006/15/EC)	100 PPM	50 PPM
Toluene	US OSHA		200 PPM
n-Butane	France OEL (VME) TWA		800 PPM
n-Butane	United Kingdom WEL	750 PPM	600 PPM
Isopentane	France OEL (VME) TWA		1000 ppm VME (INDICATIVE LIMIT)
Isopentane	United Kingdom WEL	750 PPM	600 PPM
Isopentane	European Union Occupational Exposure (2006/15/EC)		1000 PPM

Consult With a Health and Safety Professional for Specific Selections

- **ENGINEERING CONTROLS**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use with adequate ventilation. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

- **PERSONAL PROTECTION**

- **EYE PROTECTION**

Use chemical splash goggles and face shield. Supply to European Standard EN 166:2001

- **GLOVES or HAND PROTECTION**

The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Protective gloves are recommended to protect against contact with product. Nitrile(>8 hrs); Viton(>8hrs); Teflon(>8hrs). Supply to European Standard EN EN 374-1:2003

▪ **RESPIRATORY PROTECTION**

Concentration in air determines the level of respiratory protection needed. Use only European certified respiratory equipment. 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. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-demand full-face supplied air respirator with escape bottle or SCBA. Wear a European standard-approved (or equivalent) full-face piece airline respirator in the positive pressure mode with emergency escape provisions. Supply to European Standard EN 136:1998

▪ **OTHER**

Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required. The following materials are acceptable for use as protective clothing: Nitrile; Viton; Teflon; Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Remove contaminated clothing and wash before reuse. For non-fire emergencies, positive pressure SCBA and structural firefighter's protective clothing will provide only limited protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Property	Typical	Units	Method
Appearance	Clear Liquid	N/A	Unknown
Boiling Point	100	F	ASTM D 86
(Initial)	38	C	
Boiling Range	100-260	F	ASTM D 86
	38-127	C	
Liquid Conductivity	<50 varies	pS/m	Reference Value
Flash Point	- 40 Est. -40	F C	Reference Value
Melting Point	No Data	F	
pH	Not Applicable		
Octanol/Water Partition Coefficient	2-7	N/A	Reference Value
Lower Explosion Limit	1.5	%	Reference Value
Upper Explosion Limit	7.6	%	Reference Value
Specific Gravity	0.76	N/A	ASTM D 287
Solubility In Water	NIL TO 15%	wt %	Reference Value
Odor	Gasoline Odor.		Reference Value
Evaporation Rate			
Decomposition temp			
Odor Threshold	<1	ppm	Reference Value
Flammability			
Vapor Pressure	5 - 16	psia	Reference Value

Viscosity (F)	no data	SUS	ASTM D 5191
Viscosity (C)	no data	CsT	
% Volatile	100	wt %	Reference Value
Auto Ignition	536 Est. 280 Est.	F C	Reference Value

10. STABILITY AND REACTIVITY

- **STABILITY**

Stable

- **CONDITIONS TO AVOID**

Avoid heat, sparks and open flame. Avoid static discharge.

- **INCOMPATIBILITY**

The following materials are incompatible with this product: Strong oxidizers Alkaline materials; Acids; Chlorine; Concentrated oxygen; Halogens and halogenated compounds; Hydrogen peroxide;

- **HAZARDOUS DECOMPOSITION PRODUCTS**

Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.

- **HAZARDOUS POLYMERIZATION**

Will not polymerize.

11. TOXICOLOGICAL INFORMATION

- **POTENTIAL HEALTH EFFECTS**

- **PRE-EXISTING MEDICAL CONDITIONS**

The following diseases or disorders may be aggravated by exposure to this product: skin, eye, blood forming organs, nervous system, respiratory system, lung (asthma-like conditions), cardiovascular system, liver, kidney,

- **Acute Toxicity:** Samples of gasoline and a number of low boiling point naphtha streams have been tested in acute oral, dermal and inhalation studies. Results indicate the following:

- **Oral:** Rat oral LD₅₀ > 5000 mg/kg bodyweight (ARCO, 1986b)
 - **Inhalation:** Rat inhalation LC₅₀ > 5.2 mg/l (ARCO, 1992)
 - **Dermal:** Rabbit dermal LD₅₀ > 2000 mg/kg bodyweight (ARCO, 1986a)

- **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 / 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, 1986d).

- **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, 1986c). 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. Gasoline and low boiling point naphthas can contain benzene, a constituent that is classified as a germ cell mutagen (API, 1977; API, 2005).

- **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 tumours in males and in mice there was an increased incidence of liver tumours in females; further work has shown that these tumours 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 tumours. Additional work has shown that where tumours arise they are most likely a result of a non-genotoxic response due to dermal irritation (API, 1983). Gasoline and low boiling point naphthas can contain benzene, a constituent that is classified as a human carcinogen.
- **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.
- **Specific Target Organ Toxicity (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).
 - **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, 1986e)
- **Aspiration:** Gasoline and low boiling point naphthas are low viscosity, mobile hydrocarbon liquids with a viscosity at 40°C of < 7 mm²/s.

12. ECOLOGICAL INFORMATION

Gasoline spills are toxic to fish and aquatic flora.

- **Acute (short-term) Aquatic Hazard:** Acute aquatic toxicity studies with fish, invertebrates and algae on samples of gasoline and low boiling point naphtha streams show acute toxicity values in the range 1-10 mg/l. These tests were carried out on water accommodated fractions, and in closed systems to prevent evaporative loss. (EBSI 1995a,b,c, CONCAWE, 1996, Petroleum Product Steward Council, 1995)

Chronic (long-term) Aquatic Hazard:

- **Chronic aquatic toxicity:** A chronic toxicity study in daphnia with an alkylate naphtha stream gave a NOELR of 2.6 mg/l (Springborn Laboratories, 1999).

Environmental fate (biodegradation / bioaccumulation): Substance is a hydrocarbon UVCB. Standard tests for biodegradation / bioaccumulation are intended for single substances and are not appropriate for complex substances. Based on compositional information available and measured or predicted data on key constituents, gasoline and gasoline naphthas are not expected to meet the criteria for ready degradability but are inherently biodegradable. Constituents of gasoline naphthas show measured or predicted values for $\log K_{ow} \geq 3$ and are considered potentially bioaccumulative.

13. DISPOSAL INFORMATION

Follow federal, state and local regulations. This material is a is classified as hazardous waste. Do not flush material to drain or storm sewer. Contract to authorized disposal service that is registered under European Waste Directives.

Nominally empty containers are also classified as hazardous waste and therefore need to be controlled under relevant legislation

EWC No: 13 07 02.

Reuse or recycle, if necessary.

14. TRANSPORT INFORMATION

Governing Body	DOT
Mode	Ground
Proper Shipping Name	Gasoline
Hazard Class	3 (Flammable liquid)
Packing Group	II
UN/UN No.	UN 1203
Label	Flammable
Governing Body	ARD/RID
Mode	Ground
Proper Shipping Name	Gasoline
Hazard Class	3 (Flammable liquid)
Packing Group	II
UN/UN No.	UN 1203
Label	Flammable
Flashpoint	-40 F
Governing Body	IMDG
Mode	Vessel
Proper Shipping Name	Gasoline
Hazard Class	3.1 (Flammable liquid)
Packing Group	II
UN/UN No.	UN 1203
Label	Flammable
Flash point	-40 F cc

15. REGULATORY INFORMATION

Regulatory List	Component	CAS No.
CAA (Clean Air Act) - HON Rule - Organic HAPs	TOLUENE	Present
CAA (Clean Air Act) - HON Rule - SOCM Chemicals	TOLUENE	Present
CAA - 1990 Hazardous Air Pollutants	TOLUENE	Present
California - Prop. 65 - Developmental Toxicity	TOLUENE	Present
Canada - WHMIS - Ingredient Disclosure	BUTANE	Present

Canada - WHMIS - Ingredient Disclosure	TOLUENE	Present
CERCLA/SARA - Haz Substances and their RQs	TOLUENE	Present
CERCLA/SARA - Section 313 - Emission Reporting	TOLUENE	Present
CWA (Clean Water Act) - Hazardous Substances	TOLUENE	Present
CWA (Clean Water Act) - Priority Pollutants	TOLUENE	Present
CWA (Clean Water Act) - Toxic Pollutants	TOLUENE	Present
IARC – Group 3 (not classifiable)	TOLUENE	Present
IARC – Group 2B (possibly carcinogenic to humans)	GASOLINE, NATURAL	Present
Inventory - Australia (AICS)	BUTANE	Present
Inventory - Australia (AICS)	GASOLINE, NATURAL	Present
Inventory - Australia (AICS)	ISOPENTANE	Present
Inventory - Australia (AICS)	TOLUENE	Present
Inventory - Canada - Domestic Substances List	BUTANE	Present
Inventory - Canada - Domestic Substances List	GASOLINE, NATURAL	Present
Inventory - Canada - Domestic Substances List	ISOPENTANE	Present
Inventory - Canada - Domestic Substances List	TOLUENE	Present
Inventory - China	BUTANE	Present
Inventory - China	GASOLINE, NATURAL	Present
Inventory - China	ISOPENTANE	Present
Inventory - China	TOLUENE	Present
Inventory - European EINECS Inventory	BUTANE	Present
Inventory - European EINECS Inventory	GASOLINE, NATURAL	Present
Inventory - European EINECS Inventory	ISOPENTANE	Present
Inventory - European EINECS Inventory	TOLUENE	Present
Inventory - Japan - (ENCS)	BUTANE	Present
Inventory - Japan - (ENCS)	ISOPENTANE	Present
Inventory - Japan - (ENCS)	TOLUENE	Present
Inventory - Korea - Existing and Evaluated	BUTANE	Present
Inventory - Korea - Existing and Evaluated	GASOLINE, NATURAL	Present
Inventory - Korea - Existing and Evaluated	ISOPENTANE	Present
Inventory - Korea - Existing and Evaluated	TOLUENE	Present
Inventory - Philippines Inventory (PICCS)	BUTANE	Present
Inventory - Philippines Inventory (PICCS)	GASOLINE, NATURAL	Present
Inventory - Philippines Inventory (PICCS)	ISOPENTANE	Present
Inventory - Philippines Inventory (PICCS)	TOLUENE	Present
Inventory - TSCA - Sect. 8(b) Inventory	BUTANE	Present
Inventory - TSCA - Sect. 8(b) Inventory	GASOLINE, NATURAL	Present
Inventory - TSCA - Sect. 8(b) Inventory	ISOPENTANE	Present
Inventory - TSCA - Sect. 8(b) Inventory	TOLUENE	Present

APPLICABLE EUROPEAN LEGISLATION

Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations ((EC) No 1907/2006) (REACH)

Classification and Packaging Regulations ((EC) 1272/.2008) (CLP)

Commission Regulation No 453/2010

Dangerous Substances Directive (67/548/EEC) (DSD)

Hazardous Waste Directive (Directive 91/689/EC)

16. OTHER INFORMATION

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Keep out of reach of children. Precautionary labeling for pumps, portable containers, and drums is required. A "hazardous when empty" pictogram and D.O.T. flammable liquid label are also required for drums. Details available upon request. For use as motor fuel only. Do not use for any other purpose.

CLP - Definition of Hazard Statements

Hazard Number	Statement
H224	Extremely flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H361fd	Suspected of damaging fertility or the unborn child
H336	May cause drowsiness or dizziness by inhalation
H411	Toxic to aquatic life with long lasting effects

DSD - Definition of Risk Phrases

R11	Highly flammable
R38	Irritating to skin
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R51/53	Toxic to aquatic organisms, may cause long term effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R67	Vapor may cause drowsiness and dizziness

CLP - Definition of Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge
P261	Avoid breathing mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment
P280	Do not eat, drink or smoke when using this product.
P281	Use personal protective equipment as required.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 +P352	IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353	IF ON SKIN (or hair):. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a

	position comfortable for breathing.
P308+P313	If exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see ...on this label).
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use foam or dry powder for extinction
P391	Collect spillage.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up
P501	Dispose of contents/container to hazardous waste

REFERENCES (Section 11 and 12):

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 (1986a) Acute dermal toxicity study in rabbits administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60553. Los Angeles CA: ARCO

ARCO (1986b) Acute oral toxicity study in rats administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60598. Los Angeles CA: ARCO

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

ARCO (1986d) 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 (1986e) 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

ARCO (1992) Acute inhalation toxicity study (limit test) in rats administered test article F-101. UBTL Study No. 65798. Los Angeles CA: ARCO

CONCAWE (1996) Acute aquatic toxicity of gasolines. Report No. 96/57. Brussels: CONCAWE
 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

EBSI (1995a) Alga, growth inhibition test. MRD-95-048 gasoline W94/813, blend. Study performed for CONCAWE. EBSI Study No. 104867. East Millstone NJ: Exxon Biomedical Sciences Inc.

EBSI (1995b) Daphnia, acute toxicity test. MRD-95-044 gasoline W94/809, medium naphtha. Study performed for CONCAWE. EBSI Study No. 104442. East Millstone NJ: Exxon Biomedical Sciences Inc.

EBSI (1995c) Fish, acute toxicity test - rainbow trout. MRD-95-045 gasoline W94/810, isomerase. Study performed for CONCAWE. EBSI Study No. 104558. East Millstone NJ: Exxon Biomedical Sciences Inc.

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

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