SAFETY DATA SHEET



Section 1. Identification

Product name	BP Unleaded Gasolines
SDS #	12631
Code	12631
Relevant identified uses of the	substance or mixture and uses advised against
Product use	USE AS MOTOR FUEL ONLY.
Supplier	BP Products North America Inc. 150 West Warrenville Road Naperville, Illinois 60563-8460 USA
EMERGENCY HEALTH	1 (800) 447-8735
INFORMATION.	Outside the US: +1 703-527-3887 (CHEMTREC)
EMERGENCY SPILL INFORMATION:	1 (800) 424-9300 CHEMTREC (USA)
OTHER PRODUCT INFORMATION	1 (866) 4 BP - MSDS (866-427-6737 Toll Free - North America) email: bpcares@bp.com

Section 2. Hazards identification

OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	FLAMMABLE LIQUIDS - Category 1 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1

GHS label elements Hazard pictograms



Signal word Hazard statements Danger Extremely flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. May cause genetic defects. May cause cancer. Suspected of damaging the unborn child. May be fatal if swallowed and enters airways. May cause drowsiness and dizziness.

Precautionary statements

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Section 2. Hazards identification

Prevention	Obtain special instructions before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Avoid breathing vapor. Wash thoroughly after handling. Avoid release to the environment.
Response	IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	Store in well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	Contains Benzene. Prolonged or repeated exposure to benzene can cause anaemia and other blood diseases, including leukemia. See toxicological information (Section 11).

Section 3. Composition/information on ingredients

Substance/mixture Mixture		
Ingredient name	CAS number	%
Gasoline	Mixture	90 - 100
Ethanol	64-17-5	0 - 10
Contains:		
Benzene	71-43-2	0 - 3
Cyclohexane	110-82-7	0 - 1
Ethylbenzene	100-41-4	0 - 2
Toluene	108-88-3	4 - 11
1,2,4-Trimethylbenzene	95-63-6	0 - 3
xylene	1330-20-7	4 - 11
Naphthalene	91-20-3	0 - 0.5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. Get medical attention.
	If exposure to vapor, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

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Section 4. First aid measures

Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.
Specific treatments	No specific treatment.

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray. This substance will float and can be reignited on surface water.
Unsuitable extinguishing media	Do not use water jet. Never use water.
Specific hazards arising from the chemical	Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Hazardous combustion products	Combustion products may include the following: carbon dioxide carbon monoxide other hazardous substances.
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Special remarks on fire hazards	Do not use water jet.

Section 6. Accidental release measures

personnel

Personal precautions, protective equipment and emergency procedures

For non-emergency Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources. Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained positive pressure breathing apparatus (SCBA).

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Section 6. Accidental release measures

For emergency responders	Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".
Environmental precautions	Liquid leaks generate large volumes of flammable vapor, heavier than air, which may travel to remote sources of ignition (eg. along drainage systems). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for cont	ainment and cleaning up
Small spill	Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.
Large spill	Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid exposure during pregnancy. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth.
Advice on general occupational hygiene	To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/ containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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Section 7. Handling and storage

Light hydrocarbon vapors can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry to any tanks or other confined space requires a full risk assessment and appropriate control measures to be put in place in conformance with appropriate regulations and industry practice on confined space entry. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapor mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurized fuel pipes, the vapor or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapor concentrations of less than 1% of the lower flammability limit and an oxygen concentration of at least 20% volume.

Light hydrocarbon vapors can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks).

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Gasoline	ACGIH TLV (United States). TWA: 300 ppm 8 hours. Issued/Revised: 5/1996 TWA: 890 mg/m ³ 8 hours. Issued/Revised: 5/1996 STEL: 500 ppm 15 minutes. Issued/Revised: 5/1996 STEL: 1480 mg/m ³ 15 minutes. Issued/ Revised: 5/1996
Ethanol	ACGIH TLV (United States). STEL: 1000 ppm 15 minutes. Issued/Revised: 11/2008 OSHA PEL (United States). TWA: 1900 mg/m ³ 8 hours. Issued/Revised: 6/1993 TWA: 1000 ppm 8 hours. Issued/Revised: 6/1993
Benzene	ACGIH TLV (United States). Absorbed through skin. STEL: 8 mg/m ³ 15 minutes. Issued/Revised: 5/1997 STEL: 2.5 ppm 15 minutes. Issued/Revised:
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Section 8. Exposure controls/p	ection 8. Exposure controls/personal protection					
		5/1997 TWA: 1.6 mg/m ³ 8 hours. Issued/Revised: 5/1997 TWA: 0.5 ppm 8 hours. Issued/Revised: 5/1997 OSHA PEL (United States). STEL: 5 ppm 15 minutes. Issued/Revised: 6/1993 TWA: 1 ppm 8 hours. Issued/Revised: 6/1993 OSHA PEL Z2 (United States). AMP: 50 ppm 10 minutes. Issued/Revised: 6/1993 CEIL: 25 ppm Issued/Revised: 6/1993 TWA: 10 ppm 8 hours. Issued/Revised: 6/1993				
xylene		ACGIH TLV (United States). STEL: 651 mg/m ³ 15 minutes. Issued/ Revised: 5/1996 STEL: 150 ppm 15 minutes. Issued/Revised: 5/1996 TWA: 434 mg/m ³ 8 hours. Issued/Revised: 5/1996 TWA: 100 ppm 8 hours. Issued/Revised: 5/1996 OSHA PEL (United States). TWA: 435 mg/m ³ 8 hours. Issued/Revised: 6/1993 TWA: 100 ppm 8 hours. Issued/Revised: 6/1993				
toluene		OSHA PEL Z2 (United States). AMP: 500 ppm 10 minutes. Issued/Revised: 6/1993 CEIL: 300 ppm Issued/Revised: 6/1993 TWA: 200 ppm 8 hours. Issued/Revised: 6/1993 ACGIH TLV (United States). TWA: 20 ppm 8 hours. Issued/Revised: 11/2006				
1,2,4-Trimethylbenzene		ACGIH TLV (United States). TWA: 123 mg/m ³ 8 hours. Issued/Revised: 9/1994 TWA: 25 ppm 8 hours. Issued/Revised: 9/1994				
ethylbenzene		ACGIH TLV (United States). TWA: 20 ppm 8 hours. Issued/Revised: 12/2010 OSHA PEL (United States). TWA: 435 mg/m ³ 8 hours. Issued/Revised: 6/1993 TWA: 100 ppm 8 hours. Issued/Revised: 6/1993				
cyclohexane		ACGIH TLV (United States). TWA: 100 ppm 8 hours. Issued/Revised: 1/2002 OSHA PEL (United States). TWA: 1050 mg/m ³ 8 hours. Issued/Revised: 6/1993 TWA: 300 ppm 8 hours. Issued/Revised: 6/1993				
naphthalene		ACGIH TLV (United States). Absorbed				
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Section 8. Exposure controls/personal protection through skin. TWA: 52 mg/m³ 8 hours. Issued/Revised: 5/1996 TWA: 10 ppm 8 hours. Issued/Revised: 5/1996 OSHA PEL (United States). TWA: 50 mg/m³ 8 hours. Issued/Revised: 6/1993 TWA: 10 ppm 8 hours. Issued/Revised: 6/1993

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Appropriate engineering controls	exposures are adequa considered after other suitably evaluated. Po standards, be suitable Your supplier of perso selection and appropr organisation for stand Provide exhaust venti concentrations below The final choice of pro	chemicals should be assesse ately controlled. Personal prot forms of control measures (e ersonal protective equipment for use, be kept in good cond nal protective equipment sho iate standards. For further int ards. ation or other engineering con their respective occupational tective equipment will depend at all items of personal protective	ective equ e.g. engine should co dition and uld be cor formation ntrols to k exposure d upon a r	uipment should only be eering controls) have been inform to appropriate properly maintained. insulted for advice on contact your national eep the relevant airborne limits. isk assessment. It is
Environmental exposure controls	comply with the requir fume scrubbers, filters	ation or work process equipm ements of environmental prof or engineering modifications missions to acceptable levels	tection leg to the pro	islation. In some cases,
Individual protection measures				
Hygiene measures	eating, smoking and u Appropriate technique Wash contaminated of	s and face thoroughly after hat using the lavatory and at the e is should be used to remove p lothing before reusing. Ensure he workstation location.	end of the potentially	working period. contaminated clothing.
Eye/face protection	Chemical splash gogg	les.		
Skin protection				
Hand protection		ant gloves. Gloves made fron vide range of chemicals. Nitrile		astomer resistant to
	mechanical risks (i.e. deteriorate over time	Protective gloves must give abrasion, blade cut and punct due to physical and chemical he frequency of replacement y	ture). Pro damage.	tective gloves will Inspect and replace gloves
	Consult your supervis instructions.	or or Standard Operating Pro	cedure (S	.O.P) for special handling
Body protection	will only provide prote through to the skin. C skin exposure is high then chemical resistan required. Wear suitat When there is a risk of For greatest effective be anti-static. When clothes and gloves. V Laundering of contam who have been told al	ning is good industrial practice ction against light superficial of overalls should be laundered of (e.g. when cleaning up spillag at aprons and/or impervious of ple protective clothing. Footw f ignition from static electricity, here is a risk of ignition wear Vork clothing / overalls should inated work clothing should of poout the hazards of the contain of uncontaminated work cloth	contamina on a regul ges or if th hemical s ear highly y, wear an overalls, t inherently t be laund nly be dor mination.	ation that will not soak ar basis. When the risk of ere is a risk of splashing) uits and boots will be resistant to chemicals. ti-static protective clothing. boots and gloves should all r fire resistant protective ered on a regular basis. he by professional cleaners Always keep contaminated
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Section 8. Exposure controls/personal protection

	clothes. When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use only with adequate ventilation. Do not breathe vapor or mist. If ventilation is inadequate, use a NIOSH certified respirator with an organic vapor cartridge and P95 particulate filter.
	If operating conditions cause high vapor concentrations or the TLV is exceeded, use NIOSH-certified, supplied-air respirator.
	Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/ aerosol/particulates) that may arise when handling the product. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	Liquid.
Color	Clear
Odor	Hydrocarbon.
Odor threshold	Not available.
рН	Not available.
Melting point	Not available.
Boiling point	26.67 to 221°C (80 to 430°F)
Flash point	Closed cup: -42.778°C (-45°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Lower: 1.3% Upper: 7.6% (Estimated.)
Vapor pressure	48.134 to 103.146 kPa (361.97 to 775.66 mm Hg)
Vapor density	3 to 4 [Air = 1]
Density	750 kg/m³ (0.75 g/cm³)
Solubility	Very slightly soluble in water
Solubility	Very slightly soluble in the following materials: cold water.
Partition coefficient: n- octanol/water	>3
Auto-ignition temperature	257°C (494.6°F)
Decomposition temperature	Not available.
Viscosity	Not available.

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Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials. Chlorine and Fluorine
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicolo	gical effects						
Acute toxicity							
Product/ingredient name	Test	Species		Result		Exposure	Remarks
Gasoline	LC50 Inhalati Vapor	on Rat		>5610 g/m analytical	3	4 hours	Based on Gasoline
	LC50 Inhalati Vapor	on Rat		>7630 mg/ Nominal	m³	4 hours	Based on Gasoline
	LD50 Derma	Rabbit		>2000 mg/	kg	-	Based on Gasoline
	LD50 Oral	Rat		>5000 mg/	kg	-	Based on Gasoline
Ethanol	LC50 Inhalati Vapor	on Rat		124.7 mg/l		4 hours	Based on Ethanol
	LC50 Inhalati Vapor	on Rat		116.9 mg/l		4 hours	Based on Ethanol
	LC50 Inhalati Vapor	on Rat		133.8 mg/l		4 hours	Based on Ethanol
	LD50 Oral	Rat		10470 mg/	kg	-	Based on Ethanol
Conclusion/Summary Irritation/Corrosion	Not a	vailable.					
Product/ingredient name	Species	Result	Score	Exposure	Obse	ervation Conc.	Remarks
Gasoline	Rabbit	Skin - Irritant	-	-	-	-	Based on Gasoline
	Rabbit	Eyes - Non- irritating to the eyes.	-	-	-	-	Based on Gasoline
Ethanol	Rabbit	Skin - Non- irritant to skin.	-	-	-	-	Based on Ethanol
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	Rabbit	Eyes - Cornea opacity		-	-	-	-	Based on Ethanol
	Rabbit	Eyes - Ir lesion	is	-	-	-	-	Based on Ethanol
	Rabbit	Eyes - Irritant		-	-	-	-	Based on Ethanol
<u>ensitizer</u> Product/ingredient nar	ne l	Route of		Spe	cies	Result		Remarks
-		exposure						
Gasoline <mark>utagenicity</mark>	S	skin		Gui	nea pig	Not sens	itizing B	ased on Gasoline
Product/ingredient nar Gasoline		alent to OEC	D	Experin Experin	nent 1ent: In vitro	Result Negative		marks used on Gasoline
	476				: Mammal - unspecified			
		alent to OEC	D	Experin	nent: In vitro	Negative	Ba	ised on Gasoline
	471			Subject mamma	: Non- alian species			
		OPPTS 870.		Experin	nent: In vivo	Negative		ised on Gasoline
	5395			Subject Cell: Ge	: Unspecified erm		va	por condensate
		alent to OEC	D	Experin	nent: In vivo	Negative	Ba	used on Gasoline
	475			Subject Cell: Ge	: Unspecified erm			
thanol	Equiv 476	alent to OEC	D	Experin	nent: In vitro	Negative	Ba	ised on Ethanol
	4/0				: Mammal - unspecified			
	Equiv 473	alent to OEC	D	Experin	nent: In vitro	Negative	Ba	ised on Ethanol
	775			Subject mamma	: Non- alian species			
	Equiv 478	alent to OEC	D	Experin	nent: In vivo	Negative	Ba	ised on Ethanol
				Cell: Ge				
Conclusion/Summary arcinogenicity	Ma	ay cause gen	etic	aetects				
Product/ingredient								
name Gasoline	Equivalent to OECD	451	Ra	t	Inhalation	113 weeks	Negative - Inhalation - Unspecified	Based on Gasoline
	Equivalent to OECD	451	Мс	use	Dermal	102 weeks	Negative - Dermal - Unspecified	Based on Gasoline
Ethanol	EPA	OPPTS 870.4200		use	Oral	105 weeks	Positive - Oral - Unspecified	Based on Ethanol
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	Equivato to OE	alent - CD	Rat		Oral	104 weeks	Negative - Oral - Unspecified		ised on nanol
Conclusion/Summary Classification		May caus	e cancer						
Product/ingredient n	ame	OSHA	IARC	NTP					
Gasoline toluene xylene Benzene ethylbenzene		- - - +	2B 3 3 1 2B	- - Know	n to be a hum	an carcino	gen.		
naphthalene		-	2B	Reas	onably anticipa	ated to be a	a human carcin	logen	
3 - Not classifiable as NTP : Proven - Known to be Possible - Reasonably OSHA : + Potential occupation productive toxicity roduct/ingredient nat	humar y anticip nal carc	n carcinoger pated to be	ns. human car	cinoger tility	ıs. Developme	nt Spe	cies Resu	lt	Exposure
asoline		toxic	-	time	toxin	Det	la bala	-4:	0
asonne		-	Net	gative	-	Rat	Inhala	auon	2 generation
		-	-		Negative	Rat	Inhala	ation	14 days
thanol		-	Pos	sitive	-	Rat	Oral		2 generation
		-	-		Negative	Rat	Inhala	ation	18 days
onclusion/Summary		Fertility: N Effects or criteria ar	ot classifie or via lact e not met.	d. Base		data, the	ild. classification cr vailable data, tl		
pecific target organ t	toxicity	<u>(single ex</u>	<u>posure)</u>					-	
Name					Category		ute of posure	Tar	get organs
					Category 3 Category 3		t applicable. t applicable.		cotic effects spiratory tract
					0,				
kylene oluene	e				Category 3 Category 3		t applicable. t applicable.	Nar Res	cotic effects spiratory tract ation
Gasoline xylene toluene 1,2,4-Trimethylbenzene ethylbenzene	e					No		Nar Res irrit Res	cotic effects spiratory tract

Specific target organ toxicity (repeated exposure)			
Name	Category	Route of exposure	Target organs
toluene Benzene	Category 2 Category 1	Not determined Not determined	ears blood system

Aspiration hazard

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	-	ion		
Name		Result		
Gasoline xylene toluene Benzene ethylbenzene cyclohexane		ASPIRA ASPIRA ASPIRA ASPIRA ASPIRA	ATION HAZARD - Ca ATION HAZARD - Ca	ategory 1 ategory 1 ategory 1 ategory 1
nformation on the likely	Routes of entry anticipat	ed: Oral, Dermal, Inhalatio	on.	
outes of exposure				
Potential acute health effects				
Eye contact	Causes serious eye irrita	ation.		
Skin contact	Causes skin irritation.			
Inhalation	dizziness.	ous system (CNS) depress ous system (CNS) depress	-	
Ingestion		zard if swallowed harmfu		
Symptoms related to the phy	sical, chemical and toxicol	ogical characteristics		
Eye contact	Adverse symptoms may pain or irritation watering redness	include the following:		
Skin contact	Adverse symptoms may irritation redness reduced fetal weight increase in fetal deaths skeletal malformations	include the following:		
Inhalation	Adverse symptoms may nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness	include the following:		
Ingestion	Adverse symptoms may nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations	include the following:		
Delayed and immediate effect	ts and also chronic effects	from short and long ter	<u>m exposure</u>	
Short term exposure Potential immediate effects	Not available.			
Potential delayed effects Long term exposure	Not available.			
Potential immediate effects	Not available.			
Potential delayed effects	Not available.			
Potential chronic health effe	ects			
General	central nervous system e	e) or intentional overexposite effects, including unconsci	iousness, and possib	ly death.
Carcinogenicity	•	t of cancer depends on du	nation and level of ex	upusure.
Mutagenicity	May cause genetic defec			
Teratogenicity Developmental effects	Suspected of damaging No known significant effe			
	- Coopliner	Dreductiond	10624	Boge: 40/04
Product name BP Unleaded		Product code	12631	Page: 12/21
Manalan A B 1 ft				
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Section 11. Toxicological information

Fertility effects

No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information

Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

Additional information Gasoline - Excess exposure to vapors may produce headaches, dizziness, nausea, drowsiness, irritation of eyes, nose and throat and central nervous system depression. Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Inhalation of unleaded gasoline vapors did not produce birth defects in laboratory animals. Ingestion of this material can cause gastrointestinal irritation and diarrhea.

In a long-term inhalation study of whole unleaded gasoline vapors, exposure-related kidney damage and kidney tumors were observed in male rats. Similar kidney effects were not seen in female rats or in mice. At the highest exposure level (2056 ppm), female mice had an increased incidence of liver tumors. Results from subsequent scientific studies have shown that a broad variety of chemicals cause these kidney effects only in the male rat. Further studies have discovered the means by which the physiology of the male rat uniquely predispose it to these effects. Consequently, the Risk Assessment Forum of the Environmental Protection Agency has recognized that these responses are not predictive of a human health hazard. The liver tumors that were increased in the high-dose female mice are likewise of questionable significance because of their high spontaneous occurrence even without chemical exposure and because the rate of their occurrence is accelerated by a broad spectrum of chemicals not commonly considered to be carcinogens (e.g., phenobarbital). Thus, the significance of the mouse liver tumor response in terms of human health is questionable.

Gasoline is a complex mixture of hydrocarbons and contains benzene (typically no more than 2 volume%), toluene, and xylene. Chronic exposure to high levels of benzene has been shown to cause cancer (leukemia) in humans and other adverse blood effects (anemia). Benzene is considered a human carcinogen by IARC, NTP and OSHA. Over exposure to xylene and toluene can cause irritation to the upper respiratory tract, headache and narcosis. Some liver damage and lung inflammation were seen in chronic studies on xylene in guinea pigs but not in rats.

Solvent "sniffing" (abuse) or intentional overexposure to vapors can produce serious central nervous system effects, including unconsciousness, and possibly death.

Gasoline as a mixture is classified as a 2B (possible human) carcinogen by IARC.

Gasoline engine exhaust is classified as possibly carcinogenic to humans by IARC (2B). This classification is based primarily on animal and in vitro studies of gasoline engine exhaust condensates/extracts. Studies of the gaseous exhaust stream in animals did not provided sufficient evidence for classification as a carcinogen.

Gasoline: Additional toxicity information on the components:

Benzene: Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death.

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Section 11. Toxicological information

Benzene: Long-term overexposure to benzene has been associated with certain types of leukemia in humans. In addition, the International Agency for Research on Cancer (IARC), the National Toxicology Program, and OSHA consider benzene to be a human carcinogen. Chronic exposures to high levels of benzene have been reported to cause adverse blood effects including anemia. Benzene exposure can occur by inhalation and absorption through the skin.

Inhalation and forced feeding studies of benzene in laboratory animals have produced a carcinogenic response in a variety of organs, including possibly leukemia, other adverse effects on the blood, chromosomal changes and some effects on the immune system. Exposure to benzene at levels up to 300 ppm did not produce birth defects in animal studies; however, exposure to higher dosage levels resulted in a reduction of body weight of the rat pups (fetotoxicity). Changes in the testes have been observed in mice exposed to benzene at 300 ppm, but reproductive performance was not altered in rats exposed to benzene at the same level. Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material.

Toluene: Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this material. Deliberate inhalation of high concentrations of toluene has been linked to damage of the brain, liver and kidney. Inhalation of very high concentrations of toluene, such as in cases of solvent abuse, has resulted in sudden death which may be a result of cardiac arrhythmia or central nervous system depression. Mental and/or growth retardation has been reported in children of women who deliberately inhale toluene during pregnancy (usually at thousands of ppm). Fetal developmental toxicity was observed when pregnant rats were exposed to toluene at levels of 1500 ppm. Maternal toxicity was also observed at this concentration. Prolonged, high level exposure to toluene in laboratory animals has resulted in hearing loss. Exposure studies in rats have resulted in adverse effects on the kidney, liver and central nervous system. Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests. There are occupational studies which report an association between inhalation exposure to toluene and adverse effects on reproduction including spontaneous abortion. The methodology of these studies and the reliability of the results have been questioned. In a two-generation study in rats, inhalation of toluene at levels up to 2000 ppm did not produce adverse effects on fertility or reproductive performance.

Xylenes: Xylene has been reported to cause central nervous system effects at concentrations above the recommended exposure limit. Xylene vapor becomes irritating at relatively high levels. In one study, eye irritation was reported at exposures of 460 ppm and in one person at 230 ppm after 15 minutes. In another study, no one reported eyes, nose and throat irritation at mixed xylene exposures up to 230 ppm for 30 minutes. Dermal LD50 is expected to be greater than 10g/kg in rabbits, based on test results from similar materials.

Mixed xylenes caused slight hearing loss in rats exposed to 800 ppm in the air for 14 hours/day for six weeks. There is no information available for lower concentrations; however, similar chemicals that have caused these hearing effects at similar concentrations have not caused effects at lower concentrations.

Pregnant animals exposed to xylene or its isomers have been reported to cause development toxicity in rodents when exposed by inhalation. The developmental effects observed consisted of delayed development and minor skeletal variations, but no malformations. Because of the high exposure levels used in these studies, we do not believe that these results imply an increased risk of reproductive toxicity to workers exposed to xylene levels at or below the exposure limits.

Xylene and its isomers are not genotoxic.

Technical grade xylene has been tested in a National Toxicology Program carcinogenicity study in rats and mice dosed orally for two years. There was no evidence of carcinogenicity.

Ethylbenzene: :The National Toxicology Program (NTP) conducted a 13-week inhalation study with male and female rats and mice at exposure concentrations ranging from 100

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Section 11. Toxicological information

to 1000 ppm ethylbenzene. No rats or mice died during the study. Kidney, liver, and lung weights were increased in the exposed rats, while weight increases were observed only in the livers of exposed mice. Treatment-related histopathologic changes were not observed in any tissues of rats and mice.

NTP also exposed male and female rats and mice by inhalation to 0, 75, 250, or 750 ppm ethylbenzene for 2 years. There was a statistically significant increase in the number of kidney tumors in male and female rats at 750 ppm. There were also increased incidences of lung tumors in male mice and liver tumors in female mice that were statistically significant at 750 ppm. Except for the male rat kidney tumors, the incidence of the tumors were within the range observed for non-exposed animals from other studies conducted by NTP. The significance of these findings to humans is unknown. Ethylbenzene is not genotoxic. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and found it to be possibly carcinogenic to humans (Group 2B).

Ethylbenzene is not genotoxic.

This product contains trimethylbenzenes. These compounds cause irritation to the eyes, nose and respiratory tract. Repeated dermal exposure can defat and irritate the skin. Inhalation may cause dizziness and drowsiness. Studies in laboratory animals with mixtures of C9 aromatic hydrocarbons produced adverse effects on development such as increased fetal mortality, reduced fetal weight, and delayed ossification at high exposure concentrations. Effects were reduced if exposure was terminated prior to delivery. There was no evidence of reproductive toxicity.

Naphthalene has been reported to cause developmental toxicity in mice after oral exposure to relatively high dose levels, but developmental toxicity was not observed in NTP (National Toxicology Program) sponsored studies in rats and rabbits. Ingestion or inhalation of naphthalene can result in hemolysis and other blood abnormalities, and individuals (and infants) deficient in glucose-6-phosphate dehydrogenase may be especially susceptible to these effects. Inhalation of naphthalene may cause headache and nausea. Airborne exposure can result in eye irritation. Naphthalene exposure has been associated with cataracts in animals and humans.

Ethanol - Human data: In humans excessive consumption of alcoholic beverages during pregnancy is associated with the induction of Fetal Alcohol Syndrome in the offspring. Reduced birth weight and physical and mental defects occur. There is no evidence that such effects might be caused by exposures other than direct ingestion of alcoholic drinks. In humans high lifetime consumption of alcoholic beverages can be associated with certain cancers and effects on the liver. There is no evidence that these can be caused by exposure other than direct ingestion of alcoholic drinks.

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Product/ingre Gasoline	dient nam&pecies Micro-organism	Test/Result Acute EC50 15. 41 mg/l Nominal Fresh water	Exposure 40 hours	Effects growth inhibition	Remarks -
	Algae	Acute EL50 3.1 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Gasoline
	Algae	Acute EL50 3.7 mg/l Nominal Fresh water	96 hours	(growth rate)	Based on Gasoline
	Daphnia	Acute EL50 4.5 mg/l Nominal Fresh water	48 hours	Mobility	Based on straight- run light gasoline
	Fish	Acute LL50 10 mg/l Nominal	96 hours	Mortality	Based on Naphtha
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Section 12. Ecological information

Ethanol

AlgaeAcute NOELR 0. S mg/l Nominal Fresh water72 hours(growth rate)Based on GasolineDaphniaAcute NOELR 0. S mg/l Nominal Fresh water48 hoursMobilityBased on Straight run gi oliDaphniaAcute NOELR 0. S mg/l Nominal Fresh water48 hoursMobilityBased on Straight run gi oliDaphniaChronic EL50 10 -40 mg/l Nominal Fresh water21 daysReproductionBased on Naphtha (petroleum), li alkylateDaphniaChronic EL50 -40 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateFishChronic EL50 10 mg/l Nominal Fresh water21 daysReproductionBased on Naphtha (petroleum), li alkylate, read across betwee speciesFishChronic LL50 5.2 mg/l Nominal Fresh water14 daysMortalityBased on Naphtha (petroleum), li alkylate, read across betwee speciesDaphniaChronic NOELR 2.6 mg/l Nominal Fresh water21 daysReproductionBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 2.6 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 2.6 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 2.6 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 2.6 mg/l Nomi	2. ECC	plogical info	ormation			
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S mg/ Nominal Fresh waterGasolineDaphniaAcute NOELR 0. 5 mg/ Nominal Fresh water48 hoursMobilityBased on Straight run gr oilDaphniaChronic EL50 10 resh water21 daysReproductionBased on Naphtha (petroleum), li alkylateDaphniaChronic EL50 10 ×40 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateDaphniaChronic EL50 10 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateFishChronic EL50 10 mg/l Nominal Fresh water21 daysReproductionBased on Naphtha (petroleum), li alkylate, read across betwee speciesFishChronic LL50 5.2 mg/l Nominal Fresh water14 daysMortalityBased on Naphtha (petroleum), li alkylate, read across betwee speciesDaphniaChronic NOELR 16 mg/l Nominal Fresh water21 daysReproductionBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 16 mg/l Nominal Fresh water21 daysMortalityBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 16 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 2.6 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateDaphniaChronic NOELR 2.6 mg/l Nominal Fresh water21 daysMortalityBased on Naphtha (petro		Fish	mg/l Nominal	96 hours	Mortality	Naphtha (petroleum), light
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mg/l Nominal Fresh waterNaphtha (petroleum), li alkylate; read 		Daphnia	>40 mg/l Nominal	21 days	Mobility	Naphtha (petroleum), light
mg/l Nominal Fresh waterNaphtha (petroleum), li catalytic reforDaphniaChronic NOELR 		Fish	mg/l Nominal	21 days	Reproduction	Naphtha (petroleum), light alkylate; read across between
2.6 mg/l Nominal Fresh waterNaphtha (petroleum), li alkylateDaphniaChronic NOELR 16 mg/l Nominal Fresh water21 daysMobilityBased on Naphtha (petroleum), li alkylateFishChronic NOELR 2.6 mg/l Nominal 		Fish	mg/l Nominal	14 days	Mortality	
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2.6 mg/l Nominal Fresh waterNaphtha (petroleum), li catalytic reformFishChronic NOELR 		Daphnia	16 mg/l Nominal	21 days	Mobility	Naphtha (petroleum), light
2.6 mg/l Nominal Naphtha Fresh water (petroleum), li alkylate; read across betwee soil, plants Chronic PNEC >0 - 4 mg/kg - - Algae EC50 675 mg/l 4 days -		Fish	2.6 mg/l Nominal	14 days	Mortality	
4 mg/kg Algae EC50 675 mg/l 4 days - Based on Etha		Fish	2.6 mg/l Nominal	21 days	Reproduction	Naphtha (petroleum), light alkylate; read across between
		soil, plants		-	-	-
Aquatic plants EC50 4432 mg/l 7 days - Based on Etha		Algae	EC50 675 mg/l	4 days	-	Based on Ethanol
		Aquatic plants	EC50 4432 mg/l	7 days	-	Based on Ethanol

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Section 12. Ecolo	ogical info	ormation			
Da	aphnia	Acute LC50 5012 mg/l	48 hours	-	Based on Ethanol
Fi	sh	Acute LC50 153 g/l	96 hours	-	Based on Ethanol
Fi	sh	Acute LC50 14.2 g/l	96 hours	-	Based on Ethanol
Da	aphnia	Chronic LC50 2 mg/l	10 days	-	Based on Ethanol
Da	aphnia	Chronic LC50 9.6 mg/l	9 days	-	Based on Ethanol
Conclusion/Summary	Not availa	able.			
Persistence and degradabi	lity				
Partially biodegradable.					
Product/ingredient name	Test	Result		Remarks	;
Ethanol	EPA	95 % - Read	dily - 15 days	Based on	Ethanol
	EPA	84 % - Read	dily - 20 days	Based on	Ethanol
	EPA	74 % - Read	dily - 5 days	Based on	Ethanol
	EPA	74 % - Read	dily - 10 days	Based on	Ethanol
Conclusion/Summary	Not availa	able.			
Product/ingredient name	Aquatic hal	f-life	Photolysis		Biodegradability
Ethanol	-				Readily

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

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Section 13. Disposal considerations					
Ingredient	CAS #	Status	Reference number		
Xylene	1330-20-7	Listed	U239		
Toluene; Benzene, methyl-	108-88-3	Listed	U220		
Benzene (I,T)	71-43-2	Listed	U019		
Cyclohexane (I); Benzene, hexahydro- (I)	110-82-7	Listed	U056		

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	UN1203	UN1203	UN1203	UN1203
UN proper shipping name	GASOLINE	GASOLINE	MOTOR SPIRIT or GASOLINE or PETROL MARINE POLLUTANT	Motor spirit or Gasoline or Petrol
Transport hazard class(es)	3	3		3
Packing group	11	11		
Environmental hazards	No.	No.	Yes.	No.
Additional information	Reportable quantity 333.33 lbs / 151.33 kg [53. 304 gal / 201. 78 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Limited quantity Yes. Packaging instruction Passenger aircraft Quantity	The marine pollutant mark is not required when transported by road or rail. Explosive Limit and Limited Quantity Index 30 Passenger Carrying Ship Index 100 Passenger Carrying Road or Rail Index 5 Special provisions 17, 82, 88	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-E, S-E Special provisions 243	The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 353 Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 364 Limited Quantities - Passenger Aircraft
	led Gasolines Je 12/16/2014.		Product coo mat_US	de 12631 La

Section 14. Transport information

limitation: 5 L		Quantity limitation: 1 L
Cargo aircraft		Packaging
Quantity		instructions:
limitation: 60 L		Y341
<u>Special</u>		<u>Special</u>
<u>provisions</u>		<u>provisions</u>
144, 177, B1,		A100
B33, IB2, T4,		
TP1		

Special precautions for user

Not available.

Proper shipping name

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code MARPOL Annex 1 rules apply for bulk shipments by sea. Category: gasoline and spirits

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b) All components are listed or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

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Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting	toluene	108-88-3	4 - 11
requirements	xylene	1330-20-7	4 - 11
	Benzene	71-43-2	0 - 3
	1,2,4-Trimethylbenzene	95-63-6	0 - 3
	ethylbenzene	100-41-4	0 - 2
	cyclohexane	110-82-7	0 - 1
	naphthalene	91-20-3	0 - 0.5
Supplier notification	toluene	108-88-3	4 - 11
	xylene	1330-20-7	4 - 11
	Benzene	71-43-2	0 - 3
	1,2,4-Trimethylbenzene	95-63-6	0 - 3
	ethylbenzene	100-41-4	0 - 2
	cyclohexane	110-82-7	0 - 1
	naphthalene	91-20-3	0 - 0.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	The following components are listed: XYLENE; TOLUENE; ETHYL ALCOHOL; BENZENE; PSEUDOCUMENE; ETHYL BENZENE; CYCLOHEXANE
New Jersey	The following components are listed: XYLENES; BENZENE, DIMETHYL-; TOLUENE; BENZENE, METHYL-; ETHYL ALCOHOL; ALCOHOL; BENZENE; PSEUDOCUMENE; 1, 2,4-TRIMETHYL BENZENE; ETHYL BENZENE; BENZENE, ETHYL-; CYCLOHEXANE; NAPHTHALENE; MOTH FLAKES

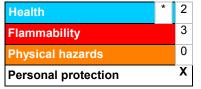
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Section 15. Regulatory information

Pennsylvania	The following components are listed: GASOLINE; BENZENE, DIMETHYL-; BENZENE, METHYL-; DENATURED ALCOHOL; BENZENE; PSEUDOCUMENE; BENZENE, ETHYL-; CYCLOHEXANE; NAPHTHALENE
California Prop. 65	WARNING: This product contains a chemical known to the State of California to cause cancer. ethylbenzene; naphthalene; cumene
	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. toluene
	WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Benzene
	Other Prop 65 chemicals will result under certain conditions from the use of this material. For example, burning fuels produces combustion products including carbon monoxide, a Prop 65 reproductive toxin.
Other regulations	
Australia inventory (AICS)	At least one component is not listed.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (ENCS)	At least one component is not listed.
Korea inventory (KECI)	At least one component is not listed.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan inventory (CSNN)	
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

National Fire Protection Association (U.S.A.)



HistoryDate of issue/Date of
revision12/16/2014.Date of previous issueNo previous validation.

Product name	BP Unleaded Gasolines		Product code	12631	Р	Page: 20/21
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			(US)		(1	ENGLISH)

Section 16. Other information

Key to abbreviations	ACGIH = American Conference of Industrial Hygienists
	ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	CAS Number = Chemical Abstracts Service Registry Number
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
	OEL = Occupational Exposure Limit
	SDS = Safety Data Sheet
	STEL = Short term exposure limit
	TWA = Time weighted average
	UN = United Nations
	UN Number = United Nations Number, a four digit number assigned by the United
	Nations Committee of Experts on the Transport of Dangerous Goods.

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.