SAFETY DATA SHEET

CITGO Pacemaker® Gas Engine Oil 1940 XL LP



Section 1. Identification

GHS product identifier	: CITGO Pacemaker® Gas Engine Oil 1940 XL LP
Synonyms	: Gas engine oil
Code	: 632086001
Code	: 032080001
Supplier's details	: CITGO Petroleum Corporation P.O. Box 4689 Houston, TX 77210
	sdsvend@citgo.com
Emergency telephone	: Technical Contact: (800) 248-4684
number (with hours of operation)	Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300
	(United States Only)
Section 2. Hazar	ds identification
OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Gas engine oil

CAS number/other identifiers

CAS number	: Not applicable.		
Ingredient name		%	CAS number
Distillates (petroleum), hydrot Distillates (petroleum), solven		≥90 ≤3	64742-54-7 64741-88-4

Any concentration shown as a range is to protect confidentiality or is due to process variation.

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.

Section 3. Composition/information on ingredients

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

Section 4. First aid measures

Description of	ⁱ necessary first	t aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	 Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects	<u> </u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympto	o <u>ms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

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

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	: Treat symptomatically and supportively.	
Ducto attain of fluct statem	. No potion shall be taken involving any namenal visit any its best suitable training	

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides metal oxide/oxides

Section 5. Fire-fighting measures

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.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-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. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	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 co	nta	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	1	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. 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 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. Keep container tightly closed and sealed until ready for use. 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. See Section 10 for incompatible materials before handling or use.
		Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits				
Distillates (petroleum), hydroti Distillates (petroleum), solven		 ACGIH TLV (United States, 3/2017). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 6/2016). TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 3/2017). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 6/2016). TWA: 5 mg/m³ 8 hours. 				
Appropriate engineering controls	: Good general ventilation should be s contaminants.	sufficient to control worker exposure to airborne				
Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment be necessary to reduce emissions to acceptable levels.						
Individual protection measure	<u>95</u>					
Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safe showers are close to the workstation location.						
Eye/face protection	 Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead. 					
Skin protection						
Hand protection	times when handling chemical produ	g with an approved standard should be worn at all ucts if a risk assessment indicates this is necessary.				
Body protection	: 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	: Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involve and should be approved by a specialist before handling this product. Leather boots are					
Respiratory protection	 not protective for liquid contact. Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. 					

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Dark brown to black
Odor	: Petroleum.
рН	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: 264°C (507.2°F) [Cleveland.]
Evaporation rate	: <1 (n-butyl acetate. = 1)
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: <0.0013 kPa (<0.01 mm Hg) [room temperature]
Vapor density	: >1 [Air = 1]
Relative density	: 0.88
Density lbs/gal	: 7.36 lbs/gal
Density gm/cm ³	: Not available.
Gravity, °API	: 28.5
Solubility	: Insoluble in the following materials: cold water.
Flow time (ISO 2431)	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 1.26 cm ² /s (126 cSt)
Viscosity SUS	: Estimated 584 SUS @104 F

Section 10. Stability and reactivity

Reactivity	: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

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Information on toxicological effects Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Oral	Rat	>5000 mg/kg	-
· · ·	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary

Section 11. Toxicological information

Distillates (petroleum), hydrotreated heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. **Distillates (petroleum), solvent-refined heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

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Irritation/Corrosion Not available.							
Skin	: 1	No additio	onal inform	ation.			
Eyes	: 1	No additio	onal inform	ation.			
Respiratory	: 1	No additio	onal inform	ation.			
<u>Sensitization</u>							
Not available.							
Skin	:	No additio	onal inform	ation.			
Respiratory	: 1	No additio	onal inform	ation.			
Mutagenicity							
Not available.							
Conclusion/Summary	: 1	No additio	onal inform	ation.			
Carcinogenicity Not available.							
	: Distillates (petroleum), solvent-refined heavy paraffinic: In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested						
Conclusion/Summary				ogenic effects have been reported in any animal species tested.			
Conclusion/Summary <u>Classification</u>							
	1						
Classification	1	two years) no carcin	ogenic effects have been reported in any animal species tested.			
Classification Product/ingredient name Distillates (petroleum), solvent-refined heavy	1	two years) no carcin	ogenic effects have been reported in any animal species tested.			
Classification Product/ingredient name Distillates (petroleum), solvent-refined heavy paraffinic Reproductive toxicity	1 -	two years) no carcin IARC 4	ogenic effects have been reported in any animal species tested. NTP -			
Classification Product/ingredient name Distillates (petroleum), solvent-refined heavy paraffinic Reproductive toxicity Not available. Conclusion/Summary Teratogenicity	1 	two years) no carcin IARC 4	ogenic effects have been reported in any animal species tested. NTP - ation.			
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Classification Product/ingredient name Distillates (petroleum), solvent-refined heavy paraffinic Reproductive toxicity Not available. Conclusion/Summary Teratogenicity Not available. Conclusion/Summary Specific target organ toxicit	1 <u>c</u> - : I : I <u>y (s</u>	two years DSHA No additic) no carcin IARC 4 onal inform onal inform	ation.			

Section 11. Toxicological information

Information on the likely routes of exposure	: Routes of entry anticipated: Dermal.
Potential acute health effects	<u>></u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effect	ts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Distillates (petroleum), solvent-refined heavy paraffinic	3.9 to 6	-	high

: 5/10/2018

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

424-8802.

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800)

SARA 302/304

Date of issue/Date of revision	: 12/13/2018	Date of previous issue	: 5/10/2018	Version : 5	8/10

Section 15. Regulatory information

Composition/information on ingredients						
SARA 304 RQ	: Not applicable.					
<u>SARA 311/312</u>						
Classification	: Not applicable.					
Composition/informat	<u>ion on ingredients</u>					
No products were found.						

State regulations

Massachusetts	:	None of the components are listed.
New York	1	None of the components are listed.
New Jersey	1	None of the components are listed.
Pennsylvania	:	None of the components are listed.

California Prop. 65 Clear and Reasonable Warnings (2018)

WARNING: This product can expose you to Ethyl acrylate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	%	Cancer	•		Maximum acceptable dosage level
ethyl acrylate	<0.001	Yes.	No.	-	-

International regulations

Inventory list

United States	: All components are listed or exempted.	
Australia	: All components are listed or exempted.	
Canada	: All components are listed or exempted.	
China	: Not determined.	
Europe	 At least one component is not listed in EINECS but all such components are listed in ELINCS. Please contact your supplier for information on the inventory status of this material. 	
lanan		
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.	
Malaysia	: Not determined.	
New Zealand	: All components are listed or exempted.	
Philippines	: All components are listed or exempted.	
Republic of Korea	: All components are listed or exempted.	
Taiwan	: Not determined.	
Thailand	: Not determined.	
Turkey	: Not determined.	
Viet Nam	: Not determined.	

Section 16. Other information

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



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Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification		Justification
Not classified.		
History		
Date of printing	: 12/13/2018	
Date of issue/Date of revision	: 12/13/2018	
Date of previous issue	: 5/10/2018	
Version	: 5	
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations 	
References	: Not available.	

Indicates information that has changed from previously issued version.

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