SAFETY DATA SHEET

CITGO Pacemaker® Gas Engine Oil 935



Section 1. Identification

GHS product identifier Synonyms Code	 CITGO Pacemaker® Gas Engine Oil 935 Gas engine oil 632030001
Supplier's details	: CITGO Petroleum Corporation P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com
Emergency telephone number	: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300 (United States Only)

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS 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 statement	<u>S</u>
General	: Avoid contact with eyes, skin and clothing. May be harmful if swallowed. IF IN EYES: Rinse cautiously with water for several minutes. If swallowed, do not induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.
Prevention	: Not applicable.
Response	: Not applicable.
Storage	 Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

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

CAS number/other identifiers

CAS number : Not applicable.

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

Date of issue/Date of revision

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:10/7/2014.
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Section 3. Composition/information on ingredients

There are no 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	 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

Potential acute health effe	<u>cts</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/symptoms			
Eye contact	: No specific data.		
Inhalation	: No specific data.		
Skin contact	: No specific data.		
Ingestion	: No specific data.		

Indication of immediate med	ical 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.	е
Specific treatments	: Treat symptomatically and supportively.	
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

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

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, protect	ctive 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 specialised 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	ontainment 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

1	Put on appropriate personal protective equipment (see Section 8).
:	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.
:	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.
	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.
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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None identified.

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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 will be necessary to reduce emissions to acceptable levels.
Individual protection measure	<u>es</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 safety 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: 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	:	Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products 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	:	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 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

Physical state	: Liquid.
Color	: Dark brown to black
Odor	: Petroleum.
рН	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 232°C (449.6°F) [Pensky-Martens.] Open cup: 270°C (518°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	: 7.29 lbs/gal
Gravity, °API	: 30.2
Solubility	: Insoluble in the following materials: cold water.
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Section 9. Physical and chemical properties

Viscosity

: Kinematic (40°C (104°F)): 1.14 cm²/s (114 cSt)

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

Information on toxicologic	<u>al effects</u>
Acute toxicity	
Conclusion/Summary	: 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.
Irritation/Corrosion	
Skin	: No additional information.
Eyes	: No additional information.
Respiratory	: No additional information.
Sensitization	
Skin	: No additional information.
Respiratory	: No additional information.
Mutagenicity	
Conclusion/Summary	: No additional information.
Carcinogenicity	
Conclusion/Summary	: No additional information.
Reproductive toxicity	
Conclusion/Summary	: No additional information.
Teratogenicity	
Conclusion/Summary	: No additional information.
Specific target organ toxi	<u>city (single exposure)</u>
Not available.	
Specific target organ toxi	<u>city (repeated exposure)</u>
Not available.	
Aspiration hazard	

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure	:	Routes of entry anticipated: Dermal.
Potential acute health effects		
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 t	he physical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Potential chronic health effects

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	
Conclusion/Summary	Not available.
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Persistence and degradabil	<u>ity</u>
Conclusion/Summary	: Not available.
-	
Bioaccumulative potential	
Not available.	
<u>Mobility in soil</u>	
Soil/water partition	: Not available.
coefficient (Koc)	
Other adverse effects	: No known significant effects or critical hazards.
Section 13. Dispo	sal 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

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. This material and its container must be disposed of in a cafe way.
of in a safe way. Empty containers or liners may retain some product residues. Avoid

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Section 13. Disposal considerations

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.
Additional information	-	-	-

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 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted.							
	Clean Water Act (CWA) 307: naphthalene							
	Clean Water Act (CWA) 311: naphthalene							
	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) 424-8802.							
<u>SARA 302/304</u>								
Composition/information	on ingredients							
SARA 304 RQ	: Not applicable.							
<u>SARA 311/312</u>								
Classification	: Not applicable.							
Composition/information	on ingredients							
State regulations								
Massachusetts	: None of the components are listed.							
New York	: None of the components are listed.							
New Jersey	: None of the components are listed.							
Pennsylvania	: None of the components are listed.							
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Section 15. Regulatory information

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
naphthalene	<0.01	Yes.	No.	Yes.	No.
ethyl acrylate	<0.001	Yes.	No.	No.	No.

International regulations

International lists	 Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): Not determined. Japan inventory: Not determined. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined.
Canada inventory	: All components are listed or exempted.
EU Inventory WHMIS (Canada)	All components are listed or exempted.Not controlled under WHMIS (Canada).

Section 16. Other information

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



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<u>History</u>	
Date of issue/Date of revision	: 11/4/2014.
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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
Notice to reader	

Section 16. Other information

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