SAFETY DATA SHEET

CITGO Pacemaker® Gas Engine Oil 815



Section 1. Identification

GHS product identifier	: CITGO Pacemaker® Gas Engine Oil 815
Synonyms	: Gas engine oil
Code	: 632026001
Supplier's details	: CITGO Petroleum Corporation P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com
Emergency telephone number (with hours of operation)	: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300 (United States Only)
Section 2. Hazard	
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	
General	: Avoid contact with eyes, skin and clothing. Thoroughly wash exposed areas and clothing with soap and water. IF IN EYES: Rinse cautiously with water for several minutes. IF SWALLOWED: Do not induce vomiting. 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 identification	: Gas engine oil

CAS number/other identifiers

CAS number : Not applicable.		
Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥90	64742-54-7

Section 3. Composition/information on ingredients

* = Various ** = Mixture *** = Proprietary

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.

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 and delayed

Potential acute health effe	ts			
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/sym	<u>ioms</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.			
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 e	ktinguishing agent suitable	for the surrounding fi	re.	
Unsuitable extinguishing media	: None kno	wn.			
Specific hazards arising from the chemical	: In a fire o	r if heated, a pressure incre	ease will occur and th	ne container may burst.	
Hazardous thermal decomposition products	: Decompo carbon di carbon m		e the following materi	als:	
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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, protec	ve 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	tainment 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	:	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), hyd	otreated heavy paraffinic	ACGIH TLV (United States, 3/2019). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist
Appropriate engineering controls	: Good general ventilation contaminants.	should be sufficient to control worker exposure to airborne
Environmental exposure controls	they comply with the requ cases, vapor controls, filte	n or work process equipment should be checked to ensure irements of environmental protection legislation. In some ers or engineering modifications to the process equipment will missions to acceptable levels.
Individual protection meas	ires_	
Hygiene measures	eating, smoking and usin Appropriate techniques sl	nd face thoroughly after handling chemical products, before g the lavatory and at the end of the working period. hould be used to remove potentially contaminated clothing. ing before reusing. Ensure that eyewash stations and safety workstation location.
Eye/face protection	industrial settings. If cont the assessment indicates Safety eyewear complying assessment indicates this	with side shields are recommended as minimum protection in fact is possible, the following protection should be worn, unless a higher degree of protection: chemical splash goggles. g with an approved standard should be used when a risk is necessary to avoid exposure to liquid splashes, mists, ion hazards exist, a full-face respirator may be required
Skin protection		
Hand protection		s complying with an approved standard should be worn at all mical products if a risk assessment indicates this is necessary.
Body protection		ment for the body should be selected based on the task being nvolved and should be approved by a specialist before
Other skin protection	measures should be sele	uid. Appropriate footwear and any additional skin protection cted based on the task being performed and the risks involved by a specialist before handling this product. Leather boots are ontact.
Respiratory protection	supplied-air respirator con indicates this is necessar	, vapors, mists or dusts. Use a properly fitted, air-purifying or mplying with an approved standard if a risk assessment y. Respirator selection must be based on known or anticipated irds of the product and the safe working limits of the selected

Section 9. Physical and chemical properties

Appearance					
Physical state	: Liquid.				
Color	: Dark brow	vn to black			
Odor	: Petroleun	n.			
рН	: Not availa	able.			
Boiling point	: Not availa	able.			
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Section 9. Physical and chemical properties

Flash point	: Closed cup: 212°C (413.6°F) [Pensky-Martens.] Open cup: 230°C (446°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	: 0.8731
Density Ibs/gal	: Estimated 7.28 lbs/gal
Density gm/cm ³	: Not available.
Gravity, °API	: Estimated 31 @ 60 F
Solubility	: Insoluble in the following materials: cold water.
Flow time (ISO 2431)	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 0.99 cm ² /s (99 cSt)
Viscosity SUS	: Estimated 459 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

Information on toxicological effects

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Acute toxicity
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Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Dermal	Rat	>5000 mg/kg	-
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LD50 Oral	Rat	>5000 mg/kg	-
Conclusion/Summary	: Distillates (petroleum), hydro highly refined oils are reported Effects from single and short-te oil mists well above applicable reaction, lipoid granuloma form studies involving exposures to l current work place exposure le Phenol, 2,2'-polythiobis[4-C8 subchronic feeding studies with reproduction were observed in calcium salt were present at co	to have low acu rm repeated ex- workplace expon- ation and lipoid ower concentra- vels produced r -30-alkyl deriver calcium brancher experimental an	te and sub-acute tox posures to high con- sure levels include lu pneumonia. In acut tions of mineral oil n o significant toxicolo s., calcium salts, ov hed alkyl phenate su nimals when residual	centrations of miner ung inflammatory e and sub-acute nists at or near gical effects. rerbased : In lfide, effects on alkyl phenol and its

No adverse reproductive effects were observed in a reproduction study of two finished lubrication oils contain 5% and 25 % of this material although male body weight was reduced. Also, data from 28 day subchronic studies of similar chemicals indicate potential induction of liver effects in rats characterized by necrosis and fibrosis at oral

5/10

Section 11. Toxicological information

doses of 250 mg/kg/day or higher. In a combined four-week repeated dose oral toxicity, neurotoxicity and reproductive toxicity screen study in rats at 50, 300, and 1000 mg/kg/ day, body weight gain was decreased. Also, there were adrenal changes in males at 1000 mg/kg/day and serum cholesterol was decreased in males at 300 mg/kg/day and above.

Irritation/Corrosion Not available.	
Skin Eyes	 No additional information. No additional information.
Respiratory	: No additional information.
Sensitization	
Not available.	
Skin	: No additional information.
Respiratory	: No additional information.
Mutagenicity	
Not available.	
Conclusion/Summary	: No additional information.
Carcinogenicity Not available.	
Conclusion/Summary Reproductive toxicity Not available.	: No additional information.
Conclusion/Summary Teratogenicity Not available.	: No additional information.
Conclusion/Summary	: No additional information.
Specific target organ toxic Not available.	<u>:ity (single exposure)</u>
Specific target organ toxic Not available.	tity (repeated exposure)
Aspiration hazard Not available.	
Information on the likely routes of exposure	: Routes of entry anticipated: Dermal.
Potential acute health effec	<u>ts</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 ph	nysical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.

Section 11. Toxicological information

Ingestion

: No specific data.

Delayed and immediate effect	cts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
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

Not available.

Mobility in soil	
Soil/water partition	: Not available.
coefficient (K _{oc})	

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

7/10

Section 13. Disposal considerations

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

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) 424-8802.
<u>SARA 302/304</u>	
Composition/information	<u>ı on ingredients</u>
SARA 304 RQ	: Not applicable.
SARA 311/312	
Classification	: Not applicable.
Composition/information	<u>ı on ingredients</u>
No products were found.	
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.
California Prop. 65 Clear a	and Reasonable Warnings (2018)

Section 15. Regulatory information

MARNING: 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	Reproductive	No significant risk level	Maximum acceptable dosage level
ethyl acrylate	<0.001	Yes.	No.	-	-
nternational regulations		•			
United States			listed on evenented		

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	: All components are listed or exempted.
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.)



: 10/5/2020

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Procedure used to derive the classification

Date of issue/Date of revision

	Classification	Justification
Not classified.		
History		
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:12/13/2018

Version :7

9/10

Date of previous issue

Section 16. Other information

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 = International Air Transport Association 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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