SAFETY DATA SHEET

CITGO CITGARD® 500 HSN Engine Oil, SAE 20W-50



Section 1. Identification

GHS product identifier	: CITGO CITGARD® 500 HSN Engine Oil, SAE 20W-50
Synonyms	: Heavy duty motor oil
Material uses	: Motor oil
Code	: 622216001
MSDS #	: 622216001
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 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	: Not classified.
substance or mixture	
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. 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 identification	: Heavy duty motor oil

CAS number	: Not applicable.
------------	-------------------

CITGO CITGARD® 500 HSN Engine Oil, SAE 20W-50

Section 3. Composition/information on ingredients

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

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

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/s	ymptoms
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

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.

Section 5. Fire-fighting measures

¥	_
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides metal oxide/oxides
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	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 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. Absorb with an inert materia 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 Advice on general occupational hygiene		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.
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.

Section 7. Handling and storage

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

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 measu	<u>res</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: 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	: 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	: 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 involved and should be approved by a specialist before handling this product. Leather boots are not protective for liquid contact.
Respiratory protection	: 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

Physical state	: Liquid.	
Color	Amber to dark amber	
Odor	Mild petroleum odor	
рН	Not available.	
Boiling point/boiling range	Not available.	
Flash point	: Open cup: 244°C (471.2°F) [Cleveland.]	
Evaporation rate	<pre><1 (n-butyl acetate. = 1)</pre>	

Section 9. Physical and chemical properties

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	: Estimated 7.34 lbs/gal
Gravity, °API	: Estimated 29 @ 60 F
Solubility	: Insoluble in the following materials: cold water.
Viscosity	: Kinematic (40°C (104°F)): 1.55 cm ² /s (155 cSt)
Viscosity SUS	: Estimated 1.07944009319107E-05 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

Acute toxicity		
Conclusion/Summary	highly refined oils are reported Effects from single and short- oil mists well above applicable reaction, lipoid granuloma forr studies involving exposures to current work place exposure le Distillates (petroleum), solve from highly refined oils are rep animals. Effects from single a of mineral oil mists well above inflammatory reaction, lipoid g sub-acute studies involving ex near current work place expose Distillates (petroleum), solve from highly refined oils are rep animals. Effects from single a of mineral oil mists well above inflammatory reaction, lipoid g sub-acute studies involving ex near current work place expose Distillates (petroleum), solve from highly refined oils are rep animals. Effects from single a of mineral oil mists well above inflammatory reaction, lipoid g sub-acute studies involving ex	otreated heavy paraffinic: Mineral oil mists derived from I to have low acute and sub-acute toxicities in animals. serm repeated exposures to high concentrations of mineral workplace exposure levels include lung inflammatory nation and lipoid pneumonia. In acute and sub-acute lower concentrations of mineral oil mists at or near evels produced no significant toxicological effects. ent-dewaxed heavy paraffinic: Mineral oil mists derived borted to have low acute and sub-acute toxicities in and short-term repeated exposures to high concentrations applicable workplace exposure levels include lung ranuloma formation and lipoid pneumonia. In acute and posures to lower concentrations of mineral oil mists derived borted to have low acute and sub-acute toxicities in and short-term repeated exposures to high concentrations applicable workplace exposure levels include lung ranuloma formation and lipoid pneumonia. In acute and posures to lower concentrations of mineral oil mists derived borted to have low acute and sub-acute toxicities in and short-term repeated exposures to high concentrations applicable workplace exposure levels include lung ranuloma formation and lipoid pneumonia. In acute and posures to lower concentrations of mineral oil mists at or applicable workplace exposure levels include lung ranuloma formation and lipoid pneumonia. In acute and posures to lower concentrations of mineral oil mists at or applicable workplace exposure levels include lung ranuloma formation and lipoid pneumonia. In acute and posures to lower concentrations of mineral oil mists at or sure levels produced no significant toxicological effects.
Irritation/Corrosion		
Skin	: No additional information.	
Eyes	: No additional information.	
Date of issue/Date of revision	: 6/18/2015.	5/9

Section 11. Toxicological information

Respiratory	: No additional information.
Sensitization	
Skin	: No additional information.
Respiratory	: No additional information.
Mutagenicity	
Conclusion/Summary	: No additional information.
Carcinogenicity	
Conclusion/Summary	: 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.
Reproductive toxicity	
Conclusion/Summary	: No additional information.
<u>Teratogenicity</u>	
Conclusion/Summary	: No additional information.
Specific target organ toxic Not available.	city (single exposure)
Specific target organ toxic	city (repeated exposure)
Not available.	
Aspiration hazard Not available.	
Information on the likely routes of exposure	: Routes of entry anticipated: Dermal.
Potential acute health effect	tts
Potential acute health effect Eye contact	: No known significant effects or critical hazards.
Eye contact	: No known significant effects or critical hazards.
Eye contact Inhalation	No known significant effects or critical hazards.No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion	 No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion Symptoms related to the ph	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion <u>Symptoms related to the ph</u> Eye contact	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion <u>Symptoms related to the ph</u> Eye contact Inhalation	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion <u>Symptoms related to the pl</u> Eye contact Inhalation Skin contact	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion <u>Symptoms related to the pl</u> Eye contact Inhalation Skin contact Ingestion	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion Symptoms related to the pl Eye contact Inhalation Skin contact Ingestion Potential chronic health et	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion Symptoms related to the ph Eye contact Inhalation Skin contact Ingestion Potential chronic health er General	 No known significant effects or critical hazards. hysical, chemical and toxicological characteristics No specific data.
Eye contact Inhalation Skin contact Ingestion Symptoms related to the pl Eye contact Inhalation Skin contact Ingestion Potential chronic health en General Carcinogenicity	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion Symptoms related to the ph Eye contact Inhalation Skin contact Ingestion Potential chronic health er General Carcinogenicity Mutagenicity	 No known significant effects or critical hazards.
Eye contact Inhalation Skin contact Ingestion Symptoms related to the pl Eye contact Inhalation Skin contact Ingestion Potential chronic health er General Carcinogenicity Mutagenicity Teratogenicity	 No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity Conclusion/Summary : Not available. Persistence and degradability **Conclusion/Summary** : Not available. **Bioaccumulative potential** Not available. **Mobility in soil** : Not available. Soil/water partition coefficient (Koc)

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. 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.
Additional information	-	-	-

Oil: The product(s) represented by this MSDS is (are) regulated as "oil" under 49 CFR Part 130. Shipments by rail or highway in packaging having a capacity of 3500 gallons or more or in a quantity greater 42,000 gallons are subject to these requirements. In addition, mixtures containing 10% or more of this product may be subject to these requirements.

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.

Section 14. Transport information

Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted			
	Clean Water Act (CWA) 307: Zinc alkyl dithiophosphate			

Clean Water Act (CWA) 311: fumaric acid; ethylenediamine; vinyl acetate 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.

SARA 302/304

Composition/information on ingredients

					SARA 302	TPQ	SARA 304	RQ
Name			%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
ethylenediamine vinyl acetate			<0.1 <0.01	Yes. Yes.	10000 1000	1337.1 129	5000 5000	668.5 644.8
SARA 304 RQ	:	35075412.1 lbs	, / 15924237. ⁻	l kg [47	'80384.5 gal	/ 18095724 L]	
SARA 311/312								
Classification	:	Not applicable.						
Composition/information	on	ingredients						
State regulations								
Massachusetts	:	None of the cor	mponents are	listed.				
New York	1	None of the cor	None of the components are listed.					
New Jersey	1	None of the cor	None of the components are listed.					
Pennsylvania	1	None of the components are listed.						
International regulations								
International lists	:	Australia inve China invento Japan invento Korea invento Malaysia Inve New Zealand Philippines in Taiwan invento	bry (IECSC): f bry: Not deter bry: All compo intory (EHS F Inventory of iventory (PIC	Not dete mined. onents a Registe Chemi CS) : Al	ermined. are listed or e r) : Not deteri cals (NZIoC Il component	exempted. mined.): All compon	ents are liste	d or exempte
Canada inventory	:	All component	s are listed or	exemp	oted.			
EU Inventory	:	Not determine	d.					
WHMIS (Canada)	:	Not controlled	under WHMIS	S (Cana	ada).			

Section 16. Other information

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



Section 16. Other information

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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.

<u>History</u>	
Date of issue/Date of revision	: 6/18/2015.
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

THE INFORMATION IN THIS SAFETY DATA SHEET (SDS) WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS OR ACCURACY. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS SDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS SDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE OR APPLICATION.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND/OR DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR ANY LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

CITGO is a registered trademark of CITGO Petroleum Corporation