SAFETY DATA SHEET

MasterPro Multi-Purpose Grease

CITGO

Section 1. Identification

GHS product identifier	: MasterPro Multi-Purpose Grease
Synonyms	: Grease ; CITGO [®] Material Code: 665408401
Code	: 665408401
MSDS #	: 665408401
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 substance or mixture	: Not classified.
GHS label elements	
Signal word	: Warning
Hazard statements	 Injection under the skin can cause severe injury. Most damage occurs in the first few hours. Initial symptoms may be minimal.
Precautionary statements	
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	: Injection of petroleum hydrocarbons requires immediate medical attention

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Grease ; CITGO [®] Material Code: 665408401

CAS number/other identifiers

CAS number	: Not applicable.
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Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy naphthenic	0 - 95	64742-52-5
calcium carbonate	1 - 5	471-34-1
Polymers	1 - 5	Proprietary

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

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

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 2 medical attention if symptoms occur. : Flush contaminated skin with plenty of water. Remove contaminated clothing and Skin contact shoes. Get medical attention if symptoms occur. : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position Ingestion 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 e	<u>ffects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	 Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sy	<u>imptoms</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

Specific hazards arising from the chemical	: No specific fire or explosion hazard.	
<u>Extinguishing media</u> Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	: None known.	
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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	tive 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 containment and cleaning up		

Small spill	 Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. 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.
	Bulk Storage Conditions: Do not apply heat or flame to stockpiled material. Rotate stock to reduce the potential for hot spots. Do not store with oxidizers. Minimize dust creation by keeping material moist and/or covered.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits		
calcium carbonate		OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust		
Appropriate engineering controls	: Good general ve contaminants.	entilation should be sufficient to control worker exposure to airborne		
Environmental exposure controls	they comply with cases, vapor cor	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 meas	ures			
Hygiene measures	eating, smoking Appropriate tech Wash contamina	rearms and face thoroughly after handling chemical products, before and using the lavatory and at the end of the working period. Iniques should be used to remove potentially contaminated clothing. ated clothing before reusing. Ensure that eyewash stations and safety se to the workstation location.		
Eye/face protection	industrial setting the assessment shields. Safety e risk assessment	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: Safety glasses with side shields. 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		ant gloves complying with an approved standard should be worn at all dling chemical products if a risk assessment indicates this is necessary.		
Body protection		ive equipment for the body should be selected based on the task being he risks involved and should be approved by a specialist before iduct.		
Other skin protection	based on the tas	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	a risk assessme	tted, particulate filter respirator complying with an approved standard if nt indicates this is necessary. Respirator selection must be based on ated exposure levels, the hazards of the product and the safe working cted respirator.		

Section 9. Physical and chemical properties

Physical state	: Solid. [Paste.]
Color	: Dark amber to black
Odor	: Petroleum.
рН	: Not available.
Boiling point	: Not available.
Flash point	: Open cup: >150°C (>302°F) [Estimated]
Evaporation rate	: <1 (n-butyl acetate. = 1)
Lower and upper explosive (flammable) limits	: Lower: 1% Upper: 7%
Vapor pressure	: <0.0013 kPa (<0.01 mm Hg) [room temperature]
Vapor density	: >10 [Air = 1]
Relative density	: 0.97
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Section 9. Physical and chemical properties

Density lbs/gal	: Estimated 8.09 lbs/gal
Gravity, °API	: Estimated 14 @ 60 F
Solubility	: Insoluble in the following materials: cold water and hot water.
NLGI Grade	: 2

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

Product/ingredient name	Result	Species	Dose	Exposure
calcium carbonate Polymers	LD50 Oral LD50 Dermal LD50 Oral	Rat Rabbit Rat	6450 mg/kg >2000 mg/kg >5000 mg/kg	- - -
Conclusion/Summary	 Distillates (petroleum), hydrof from highly refined oils are repo animals. Effects from single and of mineral oil mists well above a inflammatory reaction, lipoid gra sub-acute studies involving expo- near current work place exposu 1-Decene homopolymer, hydrof non-irritating to the skin. Distillates (petroleum), hydrof highly refined oils are reported to Effects from single and short-ten oil mists well above applicable w reaction, lipoid granuloma forma studies involving exposures to lo current work place exposure lev Poly alpha olefins: 	rted to have low a d short-term repe pplicable workpla nuloma formatior osures to lower co re levels produce ogenated: Practi reated heavy pa o have low acute m repeated exposu orkplace exposu ation and lipoid pr ower concentratio els produced no s	acute and sub-acut ated exposures to ice exposure levels on and lipoid pneum oncentrations of mid d no significant tox cally non-irritating araffinic: Mineral o and sub-acute tox osures to high cond re levels include lu neumonia. In acute ons of mineral oil m significant toxicolog	e toxicities in high concentration include lung onia. In acute and neral oil mists at or icological effects. to eyes. Practically il mists derived fror cities in animals. entrations of miner ng inflammatory and sub-acute ists at or near
	molybdenum disulphide: In ge molybdenum disulfide, exhibit a cause eye, skin and respiratory molybdenum disulfide dusts and acute ingestion studies with rats doses of molybdenum disulfide subchronic oral study, no signs disulfide at 10 to 500 milligrams experimental study, guinea pigs	low order of toxic tract irritation due l mists are similar and guinea pigs, as high as 6.0 gra of toxicity appear of molybdenum of	ty. Molybdenum of to frictional action to those of nuisar no fatalities were ams per kilogram of ed in rats receiving disulfide per anima	disulfide dust can . Other effects of ice particulates. In reported when if body weight. In a molybdenum I per day. In an

Section 11. Toxicological information

milligrams of molybdenum disulfide dust per cubic meter for one hour per day, five days per week for five weeks. Of the 25 animals studied, one animal died within three days; the appearance of the other animals was normal.

Natural graphite: Laboratory studies have associated graphite with mild pulmonary fibrotic reactions when administered to rats by intratracheal injection. Numerous epidemiological studies performed in the mining, milling and carbon electrode manufacturing industries have associated a form of pneumoconiosis with overexposure to both synthetic and natural graphite. These data are not expected to be relevant to graphic used in a grease or oil matrix.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observatio
calcium carbonate	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	-	-
Dalama	Respiratory - Irritant	Rabbit	-	-	-
Polymers	Respiratory - Mild irritant	Human	-	-	-
Skin	: No additional information.				
Eyes	: No additional information.				
Respiratory	: No additional information.				
Sensitization					
Skin	: No additional information.				
Respiratory	: No additional information.				
<u>Mutagenicity</u>					
Conclusion/Summary	: No additional information.				
O sector sector to the					
Carcinogenicity	A MARINA AND A MARINA				
Conclusion/Summary	: No additional information.				
Reproductive toxicity					
Conclusion/Summary	: No additional information.				
Teratogenicity					
Conclusion/Summary	: No additional information.				
Specific target organ toxic	<u>city (single exposure)</u>				
Not available.					
Specific target organ toxic	city (repeated exposure)				
Not available.					
Aspiration hazard					
Not available.					
nformation on the likely	: Routes of entry anticipated	d: Dermal.			
nformation on the likely outes of exposure		d: Dermal.			
nformation on the likely outes of exposure Potential acute health effec	<u>ots</u>				
nformation on the likely outes of exposure Potential acute health effec			azards.		
Not available. nformation on the likely outes of exposure Potential acute health effect Eye contact Inhalation	<u>ots</u>	ts or critical h			
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nformation on the likely outes of exposure <u>Potential acute health effec</u> Eye contact Inhalation	 ts No known significant effec No known significant effec Injection of pressurized hy 	ets or critical hasts of the carbons ca ninor.	azards. an cause seve	ere permanent tiss	sue damage.
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nformation on the likely outes of exposure Potential acute health effect Eye contact Inhalation Skin contact Ingestion	 No known significant effect No known significant effect Injection of pressurized hy Initial symptoms may be m No known significant effect 	ets or critical has ts or critical has drocarbons ca hinor. ets or critical has	azards. an cause sev azards.	ere permanent tiss	sue damage.
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Date of issue/Date of revision

Section 11. Toxicological information

Skin contact	: No specific data.
Ingestion	: No specific data.

Potential chronic health ef	ffects
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					
Product/ingredient name	Result	Species	Exposure		
calcium carbonate	Acute LC50 56000 ppm Fresh water Chronic NOEC 61 mg/g Fresh water	Fish - Gambusia affinis - Adult Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 28 days		

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

coefficient (Koc)

Soil/water partition : 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. 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 available.	Not available.
UN proper shipping name	-	Not available.	Not available.
Transport hazard class(es)	-	Not available.	Not available.
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.

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: Antimony & Antimony Compounds; Naphthenic acids, zinc salts; zinc neodecanoate			
	Clean Water Act (CWA) 311: xylene; maleic anhydride			
	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>				

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
calcium carbonate	<5	No.	No.	No.	Yes.	No.
Polymers	<5	No.	No.	No.	Yes.	No.

State regulations

Massachusetts	: The following components are listed: molybdenum disulphide; molybdenum disulphide
New York	 The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)
New Jersey	: The following components are listed: Petroleum Oil (Grease)
Pennsylvania	 The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)

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
cumene	<0.001	Yes.	No.	No.	No.
International regulations	1				
International lists	China ir Japan i Korea ir Malaysi New Ze Philippi	nventory (IEC nventory: At nventory: At a Inventory aland Inventory nes inventor	CSC): At least one least one compone least one compone (EHS Register): No ory of Chemicals	ent is not listed. ot determined. (NZIoC) : At least one c t one component is not	omponent is not listed.
Canada inventory	: All components are listed or exempted.				
EU Inventory	: At least	one compone	ent is not listed.		
WHMIS (Canada)	: Class D	-2B: Material	causing other toxic	effects (Toxic).	

Section 16. Other information

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



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History

Date of issue/Date of : 11/11/2014. revision

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 = 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) UN = United Nations

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