SAFETY DATA SHEET

CITGO Rock Drill Oil 46

Section 1. Identification

: CITGO Rock Drill Oil 46		
: Pneumatic Tool Oil		
: 633212001		
: 633212001		
: CITGO Petroleum Corporation P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com		
: 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	: 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	: Pneumatic Tool Oil

CAS number/other identifiers		
CAS number	:	Not applicable.



Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥90	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	≤2.5	64742-55-8
Distillates (petroleum), solvent-refined light paraffinic	≤3	64741-89-5

* = 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 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.
Over-exposure signs	'symptoms
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediat	e 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	1	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	None known.

Section 5. Fire-fighting measures

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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
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	ont	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

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. See Section 10 for incompatible materials before handling or use.

information and Section 13 for waste disposal.

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

Distillates (petroleum), hydrotreated heavy paraffinic

ACGIH TLV (United States, 3/2018).

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, 5/2018). TWA: 5 mg/m³ 8 hours.

Distillates (petroleum), hydrotreated light paraffinic

ACGIH TLV (United States, 3/2018). 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, 5/2018). TWA: 5 mg/m³ 8 hours.

Distillates (petroleum), solvent-refined light paraffinic

ACGIH TLV (United States, 3/2018). 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, 5/2018). TWA: 5 mg/m³ 8 hours.

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 meas	<u>lres</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.

- : Safety glasses equipped with side shields are recommended as minimum protection in Eye/face protection 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.

Section 8. Exposure controls/personal protection

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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

<u>Appearance</u>		
Physical state	1	Liquid.
Color	1	Amber.
Odor	1	Mild petroleum odor
рН	1	Not available.
Boiling point	1	Not available.
Flash point	:	Closed cup: 185°C (365°F) [Pensky-Martens.] Open cup: 210°C (410°F) [Cleveland.]
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	1	Not available.
Relative density	1	0.87
Density lbs/gal	1	Estimated 7.25 lbs/gal
Density gm/cm ³	1	Not available.
Gravity, °API	1	Estimated 31 @ 60 F
Solubility	1	Insoluble in the following materials: cold water.
Flow time (ISO 2431)	1	Not available.
Viscosity	1	Kinematic (40°C (104°F)): 0.46 cm²/s (46 cSt)
Viscosity SUS	:	Estimated 213 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.		

Date of issue/Date of revision

: 11/6/2019

Section 11. Toxicological information

Information on toxicological effects Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LD50 Dermal	Rat	>5000 mg/kg	-
5	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	3900 mg/m³	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Distillates (petroleum), solvent-refined light paraffinic	LD50 Dermal	Rabbit	2000 mg/kg	-
C .	LD50 Oral	Rat	5000 mg/kg	-

: Distillates (petroleum), hydrotreated heavy paraffinic: Mineral oil mists derived from **Conclusion/Summary** 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), hydrotreated light 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 light 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. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

Irritation/Corrosion Not available. Skin : No additional information. : No additional information. **Eves** : No additional information. Respiratory **Sensitization** Not available. : No additional information. Skin : No additional information. Respiratory **Mutagenicity** Not available. : No additional information. **Conclusion/Summary** Carcinogenicity Not available. **Conclusion/Summary** : Distillates (petroleum), hydrotreated light paraffinic: In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested. Classification

Date of previous issue

: 5/31/2018

Version : 3

S	ection 11. Toxico	logical	inforn	nation	
	Product/ingredient name	OSHA	IARC	NTP	
	Distillates (petroleum), hydrotreated light paraffinic	None.	-	-	
	Reproductive toxicity Not available.	·	·		
I	Conclusion/Summary eratogenicity Not available.	: No addit	ional inform	nation.	
	Conclusion/Summary	: No addit	ional inform	nation.	
_	Specific target organ toxicity Not available.	<u>/ (single ex</u>	<u>posure)</u>		
	Specific target organ toxicity Not available.	<u>/ (repeated</u>	<u>exposure</u>)	1	
A	spiration hazard				
Γ	Name				Result
	Distillates (petroleum), hydrotr Distillates (petroleum), solvent			;	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
	formation on the likely utes of exposure	: Not avai	able.		
<u>Pc</u>	otential acute health effects				
E	ye contact	: No know	n significar	nt effects or critical haz	zards.
h	nhalation	: No know	n significar	nt effects or critical haz	zards.
S	skin contact	: No know	n significar	nt effects or critical haz	zards.
h	ngestion	: No known significant effects or critical hazards.			
<u>Sy</u>	mptoms related to the phys	<u>sical, chem</u>	ical and to	xicological characte	<u>ristics</u>
E	ye contact	: No spec	ific data.		
h	nhalation	: No spec	ific data.		
5	Skin contact	: No spec	ific data.		
h	ngestion	: No spec	ific data.		
	elayed and immediate effect Short term exposure	<u>s and also</u>	<u>chronic ef</u>	ffects from short and	l long term exposure
	Potential immediate effects	: Not avai	able.		
	Potential delayed effects	: Not avai	able.		
L	<u>ong term exposure</u>				
	Potential immediate effects	: Not avai	able.		
	Potential delayed effects	: Not avai	able.		

Potential chronic health effects

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.
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Section 11. Toxicological information

Developmental effects Fertility effects : No known significant effects or critical hazards.

: 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.

<u>Mobility in soil</u>	
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.

Section 14. Transport information

Special precautions for user	ansport w	thin user's premises: always transport in closed containers that are
	right and s	ecure. Ensure that persons transporting the product know what to do in the
	ent of an a	ccident 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: naphthalene; ethylbenzene
		Clean Water Act (CWA) 311: xylene; naphthalene; ethylbenzene
		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 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated light paraffinic Distillates (petroleum), solvent- refined light paraffinic		ACUTE TOXICITY (inhalation) - Category 4 ASPIRATION HAZARD - Category 1 ACUTE TOXICITY (dermal) - Category 4 ASPIRATION HAZARD - Category 1

State regulations

Massachusetts	: The following components are listed: Polymer
New York	: None of the components are listed.
New Jersey	: The following components are listed: Polymer
Pennsylvania	: The following components are listed: Polymer

California Prop. 65 Clear and Reasonable Warnings (2018)

WARNING: This product can expose you to chemicals including Cumene, Naphthalene, Ethylbenzene, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	%	Cancer	Reproductive	• •	Maximum acceptable dosage level
cumene	<0.001	Yes.	No.	-	-
naphthalene	<0.001	Yes.	No.	Yes.	-
ethylbenzene	<0.001	Yes.	No.	Yes.	-

International regulations

Inventory list

United States Australia	All components are listed or exempted.All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.

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Section 15. Regulatory information

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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Classification Justification Not classified. **History** Date of printing : 11/7/2019 Date of issue/Date of : 11/6/2019 revision Date of previous issue : 5/31/2018 Version • 3 : ATE = Acute Toxicity Estimate Key to abbreviations 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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations : Not available. References

Procedure used to derive the classification

✓ Indicates information that has changed from previously issued version. <u>Notice to reader</u>

Section 16. Other information

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