Safety Data Sheet

According to OSHA HCS 2012 (29 CFR 1910.1200), Health Canada HPR (SOR/2015-17), and Mexico NOM-018-STPS-2015



SECTION 1: Identification

Product Identifier Spindle Oil 2 and Ultra-Clean Spindle Oil 2

Other means of identification Phillips 66® Spindle Oil 2

Phillips 66® Ultra-Clean Spindle Oil 2

Code LBPH817779
Issue date 19-Jul-2019
Relevant identified uses Spindle Oil
Uses advised against All others

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300

CHEMTREC Mexico 01-800-681-9531 CHEMTREC Global +1 703 527 3887

Manufacturer/Supplier

Phillips 66 Lubricants A Division of Phillips 66 Company

A Division of Phillips 66 Company

P.O. Box 421959

Houston, Texas 77242-1959

SDS Information

URL: www.phillips66.com/SDS

Phone: 800-762-0942

Email: SDS@P66.com

Customer Service

U.S.: 800-368-7128 or International: 1-832-765-2500

Technical Information 1-877-445-9198

Initial supplier identifier (Canada)

Phillips 66 Canada Ltd. PO Box 258, Station M Calgary, AB T2P 2H9 **Telephone:** 587-233-6600

Customer Service: 800-633-0383

SECTION 2: Hazard identification

Classified Hazards Not Otherwise Classified (HNOC)

H227 - Flammable liquids -- Category 4 H304 -- Aspiration Hazard -- Category 1 PHNOC: None known

HHNOC: None known

Label elements

DANGER

Combustible liquid

May be fatal if swallowed and enters airways



Keep away from heat/sparks/open flames/hot surfaces. - No smoking; Wear protective gloves/protective clothing and eye/face protection; IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting; In case of fire: Use CO2, dry chemical, or foam for extinction; Store in a well-ventilated place. Keep cool; Store locked up; Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients

| Chemical Name | CASRN | Concentration |
|--|------------|---------------|
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | 64742-47-8 | <100 |

¹ All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2 Issue date: 19-Jul-2019

Page 1/7
Status: FINAL

Page 2/7 Issue date: 19-Jul-2019 Status: FINAL

SECTION 4: First aid measures

Eye Contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

Inhalation: First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most important symptoms and effects, both acute and delayed: While significant vapor concentrations are not likely, high concentrations can cause minor respiratory irritation, headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Ingestion can cause irritation of the digestive tract, nausea, diarrhea, and vomiting. Prolonged or repeated contact may dry skin and cause irritation.

Notes to Physician: Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

SECTION 5: Firefighting measures

NFPA 704: National Fire Protection Association

Health: 0 Flammability: 2 Instability: 0



0 = minimal hazard

1 = slight hazard

2 = moderate hazard

3 = severe hazard

4 = extreme hazard

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Specific hazards arising from the chemical

Unusual Fire & Explosion Hazards: Combustible. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, or mechanical/electrical equipment). May create vapor/air explosion hazard if heated. This product will float and can be reignited on surface water. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may also be formed.

Special protective actions for fire-fighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2 Page 2/7 Status: FINAL

Issue date: 19-Jul-2019

Page 3/7 Issue date: 19-Jul-2019 Status: FINAL

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Combustible. Keep all sources of ignition away from spill/release. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

Methods and material for containment and cleaning up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

SECTION 7: Handling and storage

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8). Spills will produce very slippery surfaces. Open container slowly to relieve any pressure. Electrostatic charge may accumulate and create a hazardous condition when handling or processing this material. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-70 and/or API RP 2003 for specific bonding/grounding requirements. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames.

Conditions for safe storage: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits

| Chemical Name | ACGIH | OSHA | Mexico | Phillips 66 |
|------------------------|-------|------|--------|----------------------------|
| Hydrocarbons, C11-C14, | | | | TWA: 200 mg/m ³ |
| n-alkanes, isoalkanes, | | | | Skin |
| cyclics, <2% aromatics | | | | |

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2 Page 3/7

Issue date: 19-Jul-2019 Status: FINAL LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2

Issue date: 19-Jul-2019 Status: FINAL

industrial hygienist or similar professional, or your local agencies, for further information

Biological occupational exposure limits

Note: None

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye/face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

Skin/Hand Protection: The use of skin protection is not normally required; however, good industrial hygiene practice suggests the use of gloves or other appropriate skin protection whenever working with chemicals. Suggested protective materials: Nitrile rubber

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with organic vapor cartridges/canisters with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

SECTION 9: Physical and chemical properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance: Light amber. Transparent Flash Point: > 158 °F / > 70 °C

Physical Form: Liquid Test Method: Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010

Odor: Petroleum Initial Boiling Point/Range: No data

Odor Threshold: No data Vapor Pressure: <1 mm Hg

pH: Not applicable Partition Coefficient (n-octanol/water) (Kow): No data

Vapor Density (air=1): >1

Upper Explosive Limits (vol % in air): No data

Lower Explosive Limits (vol % in air): No data

Decemposition Temperature: No data

Decemposition Temperature: No data

Lower Explosive Limits (vol % in air): No data **Decomposition Temperature:** No data **Evaporation Rate (nBuAc=1):** <1 **Decomposition Temperature:** No data **Specific Gravity (water=1):** 0.8058 @ 60°F (15.6°C)

Particle Size: Not applicable Bulk Density: 6.71 lbs/gal

Percent Volatile: No data Viscosity: 1.02 cSt @ 100°C; 2.1 cSt @ 40°C

Flammability (solid, gas): Not applicable Pour Point: < -40 °F / < -40 °C

Solubility in Water: Insoluble

SECTION 10: Stability and reactivity

Reactivity: Not chemically reactive.

Chemical stability: Stable under normal ambient and anticipated conditions of use.

Possibility of hazardous reactions: Hazardous reactions not anticipated.

Conditions to avoid: Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.

Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous decomposition products: Not anticipated under normal conditions of use.

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2 Issue date: 19-Jul-2019

Page 4/7
Status: FINAL

Page 4/7

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2

Issue date: 19-Jul-2019 Status: FINAL

Page 5/7

SECTION 11: Toxicological information

Information on Toxicological Effects

Substance / Mixture

| Acute Toxicity | Hazard | Additional Information | LC50/LD50 Data |
|----------------|------------------------|------------------------|---------------------------|
| | | | |
| Inhalation | Unlikely to be harmful | | >5 mg/L (mist, estimated) |
| | | | |
| Dermal | Unlikely to be harmful | | > 2 g/kg (estimated) |
| | | | |
| Oral | Unlikely to be harmful | | > 5 g/kg (estimated) |
| | | | |

Likely Routes of Exposure: Inhalation, eye contact, skin contact

Aspiration Hazard: May be fatal if swallowed and enters airways

Skin Corrosion/Irritation: Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Not expected to be irritating.

Skin Sensitization: No information available on the mixture, however none of the components have been classified for skin sensitization (or are below the concentration threshold for classification).

Respiratory Sensitization: No information available.

Specific Target Organ Toxicity (Single Exposure): Not expected to cause organ effects from single exposure.

Specific Target Organ Toxicity (Repeated Exposure): Not expected to cause organ effects from repeated exposure.

Carcinogenicity: No information available on the mixture, however none of the components have been classified for carcinogenicity (or are below the concentration threshold for classification).

Germ Cell Mutagenicity: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

Reproductive Toxicity: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

Information on Toxicological Effects of Components

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Reproductive Toxicity: Hydrodesulfurized kerosene applied to the skin of female rats at 494, 330, or 165 mg/kg daily for 7 consecutive weeks (premating, mating, and gestation), or for 8 consecutive weeks in males did not result in systemic, reproductive, or developmental toxicity.

SECTION 12: Ecological information

GHS Classification: No classified hazards

Toxicity: Not expected to be harmful to aquatic life

Persistence and Degradability: Not expected to persist in the environment if spilled or released.

Bioaccumulative Potential: Material is expected to possess low bioaccumulation potential.

Mobility in Soil: Substance is expected to possess low mobility in soil.

Other adverse effects: None anticipated.

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2

Issue date: 19-Jul-2019

Page 5/7

Status: FINAL

Page 6/7 Issue date: 19-Jul-2019 Status: FINAL

SECTION 13: Disposal considerations

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste. This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever possible, Recycle used oil in accordance with applicable federal and state or local regulations. Container contents should be completely used and containers should be emptied prior to discard.

SECTION 14: Transport information

Shipping description is for bulk shipments with flashpoints below 200° F. Non-Bulk shipments and flashpoints equal to or above 200° F are unregulated.

UN Number: NA1993

UN proper shipping name: Combustible liquid, n.o.s Transport hazard class(es): Combustible liquid

Environmental Hazards: This product does not meet the DOT/UN/IMDG/IMO criteria of a marine pollutant

Special precautions for user: If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49

CFR, Part 130 apply. (Contains oil)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: Regulatory information

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds)

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CERCLA/SARA - Section 313 and 40 CFR 372

This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

EPA (CERCLA) Reportable Quantity (in pounds)

This material does not contain any chemicals with CERCLA Reportable Quantities.

California Proposition 65

WARNING. This product can expose you to chemicals including Naphthalene (CASRN 91-20-3), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

International Inventories

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.

All components are either on the DSL, or are exempt from DSL listing requirements.

SECTION 16: Other information

| Issue date | Previous Issue Date: | SDS Number | Status: |
|-------------|----------------------|------------|---------|
| 19-Jul-2019 | 08-Feb-2019 | LBPH817779 | FINAL |

Page 6/7

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2 Issue date: 19-Jul-2019

Status: FINAL

LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2

Page 7/7 Issue date: 19-Jul-2019 Status: FINAL

Revised Sections or Basis for Revision:

Shipping information (Section 14)

Mexican NOM-018-STPS-2015:

The information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the product.

Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 - Do NOT induce vomiting

P370 + P378 - In case of fire: Use dry chemical, carbon dioxide, or foam to extinguish

P403 + P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; HPR = Hazardous Products Regulations; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

Disclaimer of Expressed and implied Warranties:

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LBPH817779 - Spindle Oil 2 and Ultra-Clean Spindle Oil 2 Page 7/7 Issue date: 19-Jul-2019 Status: FINAL