SAFETY DATA SHEET

324 Spindle Oil ISO 10 and 22

Section 1. Identification

GHS product identifier : 324 Spindle Oil ISO 10 and 22

Product type : Liquid

Identified uses : Petroleum base spindle oil

Supplier's details : Schaeffer Mfg. Company
102 Barton Street
Saint Louis, Missouri 63104
Tel: 314-865-4100
Fax: 314-865-4107
Toll Free: 1-800-325-9962
E-Mail: safety@schaefferoil.com
Web: www.schaefferoil.com

Emergency Phone Number : +1 314 865-4105 (24-hour response number)
(with hours of operation)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : ASPIRATION HAZARD: Category 1.

GHS label elements

Hazard pictograms : 

Signal word : Danger.

Hazard statements : May be fatal if swallowed and enters airways.

Precautionary statements Prevention : Avoid breathing vapor or mist. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid contact with skin and clothing. Wash thoroughly after handling.
Section 2. Hazards identification

**Response**
- IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

**Storage**
- Not applicable.

**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

<table>
<thead>
<tr>
<th>Substance/mixture:</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredient Name</strong></td>
<td>%</td>
</tr>
<tr>
<td>Base Oil(s)(*)</td>
<td>60-100</td>
</tr>
<tr>
<td>2,6-di-tert Butylphenol</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic</td>
<td>30-40</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>2-8</td>
</tr>
</tbody>
</table>

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

Base oil(s) contained in this material may be described by one or more of the following CAS Nos.: 64742-01-4, 64742-52-5, 64742-54-7, 64742-57-0, 64742-62-7, 64742-65-0, 72623-85-9, 72623-87-1.

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. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact**
- Flush contaminated skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing and shoes before reuse.

**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.
### Section 4. First aid measures

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

- **Eye contact**: May cause eye irritation.
- **Inhalation**: Can cause central nervous system (CNS) depression.
- **Skin contact**: May cause skin irritation.
- **Ingestion**: Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage.

**Over-exposure signs/symptoms**

- **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.

**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**: No specific treatment.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

**Extinguishing media**

- **Suitable extinguishing media**: Use dry chemical, CO₂, water spray (fog) or foam.
- **Unsuitable extinguishing media**: Do not use water jet.

- **Specific hazards arising from the chemical**: No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- **Hazardous thermal decomposition products**: Decompositions products may include: carbon dioxide and carbon monoxide.

- **Special protective actions for fire-fighters**: No special measures are required.

- **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. 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 information in “For non-emergency personnel.”

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal, State, Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required.

Methods and materials for containment and clean up

Small spill: Stop leak if without risk. Move containers from spill area. 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. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. 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 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base oil(s)(*)</td>
<td>NIOSH REL (United States, 10/2013)</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³ 10 hours. Form: Mist</td>
</tr>
<tr>
<td></td>
<td>STEL: 10 mg/m³ 15 minutes. Form: Mist</td>
</tr>
<tr>
<td></td>
<td>ACGIH TLV (United States)</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³. Form: Oil mist</td>
</tr>
<tr>
<td></td>
<td>STEL: 10 mg/m³. Form: Oil mist</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (United States)</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³. Form: Oil mist</td>
</tr>
<tr>
<td></td>
<td>ACGIH TLV (United States, 3/2012)</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (United States, 6/2010).</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic</td>
<td>ACGIH TLV (United States).</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm 8 hours.</td>
</tr>
</tbody>
</table>

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

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: Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.

Skin protection

Hand protection: Use nitrile or oil resistant gloves.

Body protection: Personal protective clothing such as gloves, aprons, boots and complete facial protection should be selected based on the task being performed and the risks involved. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.
Section 8. Exposure controls and personal protection

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection: If a risk assessment indicates that respiratory protection is required, use a properly fitted, air-purifying or supplied air respirator that complies with an approved standard. 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

Appearance

- Physical state: Liquid. [Clear.]
- Color: Blue-green.
- Odor: Petroleum.
- Odor threshold: Not available.
- pH: Not applicable.
- Melting point/Dropping point: Not available.
- Boiling point: >315°C (>599°F)
- Flash point: Open cup: 174 to 204°C (345 to 400°F) [Cleveland.]
- Evaporation rate: Not available.
- Flammability (solid, gas): Not available.
- Lower and upper explosive (flammable) limits: Not available.
- Vapor pressure: Not available.
- Vapor density: >1 [Air = 1]
- Relative density: 0.84 to 0.865
- Solubility: Negligible in water.
- Partition coefficient: n-octanol/water: Not available.
- Auto-ignition temperature: Not available.
- Decomposition temperature: Not available.
- Viscosity: Kinematic (100°C): 2.75 to 5.0 cSt
- Volatility: Not available.
- VOC content: 0.019 % (w/w)

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous: May react with oxygen and strong oxidizing agents, such as chlorates, peroxides, etc.

Conditions to avoid: No specific data.

Incompatible materials: Reactive or incompatible with the following materials: Strong acids, bases and oxidizers.

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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-Butylphenol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;10g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1320 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic</td>
<td>LC 50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>5.7 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-Butylphenol</td>
<td>Skin – Moderate irritant</td>
<td>Rat</td>
<td>-</td>
<td>0.5 mL</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization
There is no data available.

Carcinogenicity
There is no data available.

Specific target organ toxicity (single exposure)
There is no data available.

Specific target organ toxicity (repeated exposure)
There is no data available.

Aspiration hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

Information on the likely routes of exposure
Dermal contact. Eye contact. Inhalation. Ingestion.

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.

Symptoms related to the physical, chemical and toxicological characteristics

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.
Section 11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: No known significant effects or critical hazards.

Potential delayed effects: No known significant effects or critical hazards.

Long term exposure

Potential immediate effects: No known significant effects or critical hazards.

Potential delayed effects: No known significant effects or critical hazards.

Potential chronic health effects

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.

Numerical measures of toxicity

Acute toxicity estimates There is no data available.

Section 12. Ecological information

Toxicity
There is no data available.

Persistence and degradability
There is no data available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-Butyphenol</td>
<td>4.5</td>
<td>-</td>
<td>high</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>): 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 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 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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. 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: Not regulated.
IMDG: Not regulated.
IATA/ICAO: Not regulated.
AERG: Not applicable

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 to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulation: TSCA 8(a) PAIR: Diphenylamine; Naphthalene
TSCA 8(a) CDR Exempt/Partial exemption: Not determined.
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Naphthalene
Clean Water Act (CWA) 311: Naphthalene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed.
Clean Air Act Section 602 Class I Substances: Not listed.
Clean Air Act Section 602 Class II Substances: Not listed.
DEA List I Chemicals (Precursor Chemicals): Not listed.
Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals): Not listed.

SARA 302/304
Composition/information on ingredients: No products were found.

SARA 304 RQ: Not applicable.

SARA 311/312
Classification: Not applicable.

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-Butylphenol</td>
<td>0.1-1</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

SARA 313
No products were found.

State regulations
Massachusetts: The following components are listed: mineral oil, petroleum distillates, hydrotreated light naphthenic.

New York: None of the components are listed.

New Jersey: The following components are listed: Residual oils (petroleum), hydrotreated; Distillates (petroleum), hydrotreated heavy naphthenic; Residual oils (petroleum), solvent-refined; Residual oils (petroleum), solvent-dewaxed; Distillates 9petroleum), solvent-dewaxed heavy paraffinic.

Pennsylvania: None of the components are listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ethyl acrylate</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 1 Flammability: 1 Physical hazards: 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller.

The customer is responsible for determining the PPE code for this material.
Section 16. Other information

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

Health: 1  Flammability: 1  Instability: 0

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US Tariff Heading Number : 3403.19.0000

Schedule B Code : 3403.19.0000

History

Date of issue mm/dd/yyyy : 04/15/2015
Version : 1

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