### 1. Identification

**Product identifier used on the label:** STARFIRE Full Synthetic HD 5W40 CK-4 Motor Oil  
**Product Code:** 663

**Other means of identification:**  
**Synonyms:** No data available

**Recommended use of the chemical and restrictions on use:**  
**Recommended use:** Motor Oil  
**Restrictions on use:** Uses other than those described above

**Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:**  
**Name:** PennStar  
**Address:** 6 Horwith Dr.  
**City:** Northampton, PA 18067  
**Phone number:** +01 (484) 275-7990

**Emergency phone number:** CHEMTREC: +1 (800) 424-9300 International: +01 (703) 527-3887

### 2. Hazard(s) identification

**Classification of the chemical in accordance with paragraph (d) of §1910.1200:**

**GHS Classification:** Not classified as hazardous under OSHA

**Hazards not otherwise classified:** No data available

### 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>No data available</td>
<td>64742-65-0</td>
<td>3 - 7</td>
</tr>
<tr>
<td>Phenol, (tetrapropenyl) derivatives</td>
<td>No data available</td>
<td>74499-35-7</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

One or more hazardous ingredient(s) is claimed as a trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on this SDS.

### 4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin
and eye contact, and ingestion:

Inhalation:  Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.

Eye Contact: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

Ingestion: No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS.

Most important symptoms/effects, acute and delayed:

Indication of immediate medical attention and special treatment needed, if necessary: No additional first aid information available.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.

Unsuitable extinguishing media: No data available

Specific hazards arising from the chemical:

Hazardous combustion products: Carbon monoxide, Sulfur containing gases, Nitrogen containing gases, Aldehydes, oxides of phosphorus, Hydrogen sulfide, Smoke

Special protective equipment and precautions for fire-fighters: Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

6. Accidental release measures

Personal precautions, protective Exposure to the spilled material may be irritating or harmful. Follow
equipment and emergency procedures: personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Methods and materials for containment and cleaning up: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Dispose of according to Federal, State, Local, or Provincial regulations. Used fluid should be disposed of at a recycling center.

7. Handling and storage

Precautions for safe handling: Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Empty containers may retain product residues/vapors. Use proper bonding and grounding during bulk product transfer. Follow all protective equipment recommendations provided in Section 8.

Conditions for safe storage, including any incompatibilities:

Safe storage conditions: Store in a cool dry place. Isolate from incompatible materials.

Materials to Avoid/Chemical Incompatibility: Strong oxidizing agents

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

<table>
<thead>
<tr>
<th>Chemical component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>ACGIH STEL</th>
<th>IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>10 mg/m3</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>10 mg/m3</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>10 mg/m3</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Appropriate engineering controls: Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Individual protection measures, such as personal protective equipment:

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Respirator Type(s): None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Eye protection: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile, Neoprene

General hygiene conditions: Follow all protective equipment recommendations provided in Section 8.

9. Physical and chemical properties

Appearance (physical state, color etc.):

- Physical state: Liquid
- Color: Brown
- Odor: Mild
- Odor Threshold: Not determined
- pH: No data available

Melting point/freezing point:

- Melting Point: No data available
- Freezing point: No data available

Initial boiling point and boiling range (°C):

- COC

Flash Point (°C): 226
### 10. Stability and reactivity

**Reactivity:**
There are no known reactivity hazards associated with this product.

**Chemical stability:**
Stable under normal conditions.

**Possibility of hazardous reactions:**
None expected under standard conditions of storage.

**Conditions to avoid (e.g., static discharge, shock, or vibration):**
Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Moisture (will lead to product performance degradation).

**Incompatible materials:**
Strong oxidizing agents

**Hazardous decomposition products:**
Carbon monoxide, Sulfur containing gases, Nitrogen containing gases, Aldehydes, oxides of phosphorus, Hydrogen sulfide, Smoke

### 11. Toxicological information

**Description of the various toxicological (health) effects and the available data used to identify those effects:**

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):**
Skin contact, Inhalation, Ingestion, Eye contact

**Symptoms related to the physical,**
No data available
chemical and toxicological characteristics:

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

Ingestion: No hazard in normal industrial use. Estimated to be > 5.0 g/kg.

Skin Contact: This material is likely to be moderately irritating to skin based on animal data. Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Absorption: Estimated to be > 5.0 g/kg; practically non-toxic

Inhalation: No hazard in normal industrial use. Likely to be practically non-toxic based on animal data.

Eye Contact: The material is likely to be moderately irritating to eyes based on animal data. Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Sensitization: Non-hazardous under Respiratory Sensitization category.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Carcinogenicity: Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH’s and is not considered a carcinogen by the International Agency for Research on Cancer.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: None known.

Numerical measures of toxicity (such as acute toxicity estimates):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>Oral LD50 Rat &gt; 15000 mg/kg</td>
<td>Dermal LD50 Rabbit &gt; 5000 mg/kg</td>
<td>Inhalation LC50 (4h) Rat = 2.18 mg/L</td>
</tr>
</tbody>
</table>
12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): Severe ecological hazard. This product may be toxic to plants and/or wildlife.

Ecological Toxicity Data:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Aquatic EC50</th>
<th>Aquatic ERC50</th>
<th>Aquatic LC50 Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>64742-65-0</td>
<td>Aquatic LC50 (48h) &gt; 1000 mg/L</td>
<td>No data available</td>
<td>Aquatic LC50 (96h) Rainbow Trout &gt; 5000 mg/L</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>64742-54-7</td>
<td>Aquatic LC50 (48h) &gt; 1000 mg/L</td>
<td>No data available</td>
<td>Aquatic LC50 (96h) Rainbow Trout &gt; 5000 mg/L</td>
</tr>
<tr>
<td>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</td>
<td>72623-87-1</td>
<td>Aquatic EC50 (48h) Daphnia &gt; 1000 mg/L</td>
<td>No data available</td>
<td>Aquatic LC50 (96h) &gt; 5000 mg/L</td>
</tr>
</tbody>
</table>

Persistence and degradability: Biodegrades slowly.

Bioaccumulative potential: Bioconcentration may occur.

Mobility in soil: This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.

Other adverse effects (such as hazardous to the ozone layer): None known.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: Spent or discarded material is non-hazardous according to environmental regulations.
Contaminated packaging: Recycle containers whenever possible.

14. Transport information

Carriage of dangerous goods by road (DOT), rail or inland waterways:
DOT Basic Description: No data available

International carriage of dangerous goods by sea (IMDG/IMO):
UN number: Not regulated by IMDG
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group, if applicable: Not applicable

International carriage of dangerous goods by air (IATA):
UN number: Not regulated by IATA
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group, if applicable: Not applicable

Environmental hazards (e.g., Marine pollutant (Yes/No)): None.
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): No data available
Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: No data available

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:
TSCA Status: All components of this material are on the US TSCA Inventory or are exempt.
Regulated Components:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>CERCLA</th>
<th>Sara EHS</th>
<th>Sara 313</th>
<th>U.S. HAP</th>
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<td>Phenol, (tetrapropenyl) derivitives</td>
<td>74499-35-7</td>
<td>N</td>
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<table>
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<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>California Prop 65 - Cancer</th>
<th>California Prop 65 - Dev. Toxicity</th>
<th>California Prop 65 - Reprod fem</th>
<th>California Prop 65 - Reprod male</th>
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<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Massachusetts RTK List</th>
<th>New Jersey RTK List</th>
<th>Pennsylvania RTK List</th>
<th>Rhode Island RTK List</th>
<th>Minnesota Hazardous Substance List</th>
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# Safety Data Sheet

**STARFIRE Full Synthetic HD 5W40 CK-4**  
**Revision Date:** 02-20-2019

<table>
<thead>
<tr>
<th>Substance Description</th>
<th>N</th>
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## 16. Other information, including date of preparation or last revision.

**Revision Date:** 02-20-2019  
**Revision Number:** 42  
**Reason for revision:** NEW VERSION  
**References:** No data available  
**Other Info:** No data available  

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