1. Identification

Product identifier used on the label: STARFIRE Premium Plus 15W40 CK-4 Motor Oil
   Product Code: 644

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:
   PennStar
   6 Horwith Dr.
   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

% unknown toxicity (Oral): 12.659651 % of the mixture consists of ingredient(s) of unknown toxicity.
% unknown toxicity (Dermal): 12.69307 % of the mixture consists of ingredient(s) of unknown toxicity.
% unknown toxicity (Inhalation Gas): 98.678056 % of the mixture consists of ingredient(s) of unknown toxicity.
% unknown toxicity (Inhalation Vapor): 98.697858 % of the mixture consists of ingredient(s) of unknown toxicity.
% unknown toxicity (Inhalation Dust): 98.697858 % of the mixture consists of ingredient(s) of unknown toxicity.

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>0.5 - 1.5</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:** Use eye wash to remove a chemical from the eye. Flush the affected eye for at least fifteen minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. 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:** No data available

**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 equipment and emergency procedures:** No health affects expected from the clean up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS.

**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:** Mildly irritating material. Avoid unnecessary exposure. 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>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, solvent dewaxed 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: No special requirements under normal industrial use.

Skin protection: Where use can result in skin contact, practice good personal hygiene and wear impervious gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Neoprene, Nitrile

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

Flash Point (°C): 223

Evaporation Rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits:
  Upper flammability or explosive limits: = 10
  Lower flammability or explosive limits: = 1

Vapor pressure: No data available
10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity:</td>
<td>There are no known reactivity hazards associated with this product.</td>
</tr>
<tr>
<td>Chemical stability:</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions:</td>
<td>None expected under standard conditions of storage.</td>
</tr>
<tr>
<td>Conditions to avoid (e.g., static discharge, shock, or vibration):</td>
<td>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).</td>
</tr>
<tr>
<td>Incompatible materials:</td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products:</td>
<td>Carbon monoxide, Sulfur containing gases, Nitrogen containing gases, Aldehydes, oxides of phosphorus, Hydrogen sulfide, Smoke</td>
</tr>
</tbody>
</table>

11. Toxicological information

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the various toxicological (health) effects and the available data used to identify those effects:</td>
<td>Skin contact, Inhalation, Ingestion, Eye contact</td>
</tr>
<tr>
<td>Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):</td>
<td>No data available</td>
</tr>
<tr>
<td>Symptoms related to the physical, chemical and toxicological characteristics:</td>
<td>No data available</td>
</tr>
<tr>
<td>Delayed and immediate effects and also chronic effects from short- and long-term exposure:</td>
<td>No hazard in normal industrial use. Likely to be practically non-toxic by ingestion based on animal data.</td>
</tr>
<tr>
<td>Ingestion:</td>
<td>This material is likely to be slightly irritating to skin based on animal data. Can cause minor skin irritation, defatting, and dermatitis.</td>
</tr>
<tr>
<td>Skin Contact:</td>
<td>Likely to be practically non-toxic based on animal data.</td>
</tr>
</tbody>
</table>
Inhalation: Likely to be practically non-toxic based on animal data.
Eye Contact: This material is likely to be non-irritating to eyes based on animal data.
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>

Is the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no components that are known or reported to cause cancer.</td>
<td></td>
<td></td>
<td></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: Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO).

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:

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>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>64742-54-7</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>64742-65-0</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>64742-54-7</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
# Safety Data Sheet

## STARFIRE Premium Plus 15W40 CK-4

**Revision Date:** 02-20-2019

<table>
<thead>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>64742-54-7</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>64742-65-0</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

## 16. Other information, including date of preparation or last revision.

**Revision Date:** 02-20-2019  
**Revision Number:** 26  
**Reason for revision:** NEW VERSION  
**References:** No data available  
**Other Info:** No data available  

**Disclaimer:** This safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in the data sheet which we have received from outside sources and we believe the information to be correct, but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product in a safe manner and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.