1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name
HIGH TEMP SYNTHETIC LUBRICATING OIL VG 220

Other means of identification
Product code: None
Synonyms

Recommended use of the chemical and restrictions on use
Recommended Use Lubricant.
Uses advised against No information available

Details of the supplier of the safety data sheet
Supplier Address
Howden Roots LLC
900 West Mount Street
Connersville, Indiana 47331
Phone: 765-827-9332

Emergency telephone number
Emergency Telephone

2. HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

WHMIS 2015 Regulatory Status
This chemical is not considered hazardous by the Canadian Hazardous Products Regulations (WHMIS 2015).

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements

EMERGENCY OVERVIEW

Signal word
Not classified

Hazard statements
None

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Oil
Physical state Liquid
Odor Slight Sulphurous

Eyes None
Skin None
Inhalation None
Ingestion None
3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

4. FIRST AID MEASURES

First aid measures

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

Skin contact: Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.

Inhalation: In the case of inhalation of aerosol/mist consult a physician if necessary.

Ingestion: Do not induce vomiting without medical advice. Drink 1 or 2 glasses of water. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide (CO2), Dry chemical. Water spray mist or foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire

Specific hazards arising from the chemical Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire, cool tanks with water spray.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal precautions: Contaminated surfaces will be extremely slippery. Wear personal protective equipment.

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling: Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines: Contains mineral oil, vegetable oil, and/or synthetic oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg/m³, ACGIH STEL of 10 mg/m³.

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection: Breathing apparatus needed only when aerosol or mist is formed.
Hand protection: Gloves made of plastic or rubber
Eye protection: Safety glasses
Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect
General Hygiene Considerations: Avoid contact with skin, eyes and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
<th>pH</th>
<th>Boiling point / boiling range</th>
<th>Evaporation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Oil</td>
<td>Odor Slight Sulphurous</td>
<td>Color Amber</td>
<td>Odor threshold No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 232 °C / 450 °F</td>
<td>Cleveland Open Cup</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 10. STABILITY AND REACTIVITY

**Reactivity**

Not classified

**Chemical stability**

**Stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal use conditions.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

No special storage conditions required

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors

**Incompatible materials**

Oxidising agents

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

Product does not present an acute toxicity hazard based on known or supplied information
Eye contact May cause slight irritation.

Skin contact Substance does not generally irritate and is only mildly irritating to the skin.

Inhalation Avoid breathing vapors or mists.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No sensitization responses were observed.

Mutagenic effects: Did not show mutagenic or teratogenic effects in animal experiments.

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.

STOT - single exposure None under normal use conditions.

STOT - repeated exposure None under normal use conditions.

Aspiration hazard Not classified.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 2.07 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

\[
\begin{array}{lcl}
\text{ATEmix (oral)} & 7858 & \text{mg/kg} \\
\text{ATEmix (dermal)} & 5174 & \text{mg/kg} \\
\text{ATEmix (inhalation-dust/mist)} & 30.3 & \text{mg/l} \\
\text{ATEmix (inhalation-vapor)} & 25914 & \text{mg/l}
\end{array}
\]

12. ECOLOGICAL INFORMATION

Ecotoxicity

No known hazards to the aquatic environment.

2.07 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

The product is insoluble and floats on water.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.
### 14. TRANSPORT INFORMATION

**DOT**
- Not Regulated by any means of transportation

**TDG**
- Not Regulated

**IATA-DGR**
- Not Regulated

**IMO / IMDG**
- Not Regulated

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>International Inventories</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TSCA:</strong></td>
<td>Listed in TSCA</td>
</tr>
<tr>
<td><strong>DSL:</strong></td>
<td>Not listed in DSL</td>
</tr>
<tr>
<td><strong>EINECS/ELINCS:</strong></td>
<td>This product complies with EINECS/ELINCS</td>
</tr>
<tr>
<td><strong>CHINA:</strong></td>
<td>This product does not comply with China IECSC.</td>
</tr>
<tr>
<td><strong>KECL:</strong></td>
<td>This product does not comply with Korea KECL.</td>
</tr>
<tr>
<td><strong>PICCS:</strong></td>
<td>This product does not comply with Philippines PICCS.</td>
</tr>
<tr>
<td><strong>AICS:</strong></td>
<td>This product does not comply with Australia AICS</td>
</tr>
</tbody>
</table>

**Legend:**
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

**Canada HPR Statement**
This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations (WHMIS 2015).

**US Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

**CWA (Clean Water Act)**

Page
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations (RTK)

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide Registration Number  Not classified

16. OTHER INFORMATION

NFPA:
Health: 1
Flammability: 1
Instability 0
NFPA/HMIS * for Carc, Muta, Tera, Specific Organ *
HMIS health rating:
Health: 1
Flammability: 1
Physical hazards 0
Personal protection B

Issue Date 29-Jan-2019
Revision Date 29-Jan-2019
Revision Note None
Reason for revision: None

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet