1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SANTOLUBE® 220 TRACTION LUBRICANT

Chemical Family: Synthetic Hydrocarbon Mixture
Chemical Name: –

CHEMICAL EMERGENCY: Call CHEMTREC 1-800-424-9300 or 703-527-3887
For additional non-emergency information, call: 636-723-0240

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synthetic Hydrocarbons 70 – 99%
Zinc Dialkyl Dithiophosphate 3%

3. HAZARDS IDENTIFICATION

Primary routes of exposure:
- Eye contact: Material may cause slight to moderate irritation.
- Skin contact: Slight to moderate irritation is expected.

4. FIRST AID MEASURES

EYES: Immediately flush with plenty of water for at least 15 minutes. Call a physician.
SKIN: Wipe off excess and wash with soap and plenty of water. Remove contaminated clothing. Wash clothing before reuse.

5. FIRE FIGHTING MEASURES

Flash Point: 163°C (325°F) (COC)

EXTINGUISHING MEDIA: Water spray, foam, dry chemical, carbon dioxide, or any Class B extinguishing agent.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters or others likely to be exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Equipment must be thoroughly decontaminated after use.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Products of decomposition include carbon monoxide, carbon dioxide, hydrogen sulfide, and hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES
IN CASE OF SPILL OR LEAK: Absorb with a suitable media such as sawdust, clay or filtercel.

7. HANDLING AND STORAGE

SANTOLUBE® 220 lubricant is stable under ordinary handling and storage conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Causes only slight eye irritation. No special protection required. Avoid eye contact as good industrial practice.

SKIN PROTECTION: Wear appropriate protective gloves that provide a barrier and protective clothing to prevent skin contact. Consult glove manufacturer to determine appropriate type glove for given application. Wear face shield and apron when splashing is likely. Wash contaminated skin promptly. Launder contaminated clothing and clean protective equipment before reuse. Wash thoroughly after handling.

RESPIRATORY PROTECTION: Avoid breathing vapor or mist. Use NIOSH/MSHA approved equipment. The respirator use limitations specified by NIOSH/MSHA or the manufacturer must be observed. High airborne concentrations may require use of self-contained breathing apparatus or supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

VENTILATION: Provide ventilation to minimize exposure. Use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fluorescent yellow to yellow-orange liquid</td>
</tr>
<tr>
<td>Density @ 25°C</td>
<td>0.83 – 0.92 g/mL</td>
</tr>
<tr>
<td>Viscosity @ 100°F</td>
<td>200-240 cSt</td>
</tr>
<tr>
<td>Solubility in Cold Water</td>
<td>Extremely low</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability: Stable under ordinary handling and storage conditions.

Materials to Avoid: Exposure to highly oxidizing materials must be avoided.

Hazardous Decomposition Products: No uniquely hazardous decomposition products are expected. If the product is burned, carbon dioxide, carbon monoxide, low molecular weight hydrocarbons, soot, and smoke can be produced.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data

The following acute data were developed on the synthetic hydrocarbon base fluid, and are considered to be representative of SANTOLUBE® 220.
Oral LD50 (Rat): Greater than 15,800 mg/kg, Practically Nontoxic
Dermal LD50 (Rabbit): Greater than 7,940 mg/kg, Practically Nontoxic
Eye Irritation (Rabbit, 24-hr): 3.5 on a scale of 110.0, Slightly Irritating
Skin Irritation (Rabbit, 24-hr): 0.0 on a scale of 8.0, Nonirritating

Vapor Inhalation (Rat): Rats were exposed to a stream of air passed through the lubricant and led directly into the experimental chamber. Due to its low volatility, there was essentially no vaporization of the test material and the animals survived both the 6-hour exposure and subsequent 10-day observation periods without observable effects.

12. ECOLOGICAL INFORMATION

SANTOLUBE® 220 had a primary degradation rate of 7% to 21% in a 24-hour semi-continuous activated sludge test (SCAS). Biodegradability of this material was classified as slow to resistant.

Oral LD50 Mallard Duck: Greater than 4,640 mg/kg, Practically Nontoxic
Oral LD50 Bobwhite Quail: Greater than 4,640 mg/kg, Practically Nontoxic
96-hr LC50 Fathead Minnow: Greater than 1,000 mg/l, Practically Nontoxic

The bioaccumulation potential in bluegill sunfish was measured over a 32-day period. It was determined that this material has a moderate potential to bioaccumulate in this aquatic specie.

13. DISPOSAL CONSIDERATIONS

This material when discarded is not a hazardous waste as defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dispose of in accordance with all federal, state and local environmental regulations. Recommended method of disposal is by high temperature incineration in a RCRA approved TSDF.

14. TRANSPORT INFORMATION

Hazard Class:
This material is not classified as a hazardous material by the U.S. Department of Transportation (DOT) or by the International Air Transport Association (IATA).

15. REGULATORY INFORMATION

Section 313 Toxic Chemical(s): Not Applicable

16. OTHER INFORMATION

HAZARD MATERIAL INFORMATION

**HAZARD INDEX**

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<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Other Hazard</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

**PCA-HMIS**

- **SANTOLUBE® 220**
  - 0 = Minimal Hazard
  - 1 = Slight Hazard
  - 0 = Moderate Hazard
  - 1 = Serious Hazard
  - 0 = Severe Hazard

**SANTOLUBE®** is a trademark of SANTOLUBES LLC.

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DATE: 06/16/09

Supersedes 03/20/08