

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Star Premium Oils Synthetic Blend 5W-20 SN  
**Product Code:** 525  
**Chemical Name:** Motor Oil  
**Chemical Family:** Engine oil lubricant  
**Recommended Use:** Motor Oil/Engine Lubricant for Motor Vehicles  
**Manufacturer:** Lubricants LLC **Emergency Telephone Numbers:** 484-619-1393  
6 Horwith Drive Information: 484-275-7990 8am-5pm EST M-F  
Northampton, PA 18067

2. HAZARD IDENTIFICATION



**WARNING**

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910.1200 (OSHA HC)**

May cause eye irritation, Category 2B H320

May cause skin irritation, Category 3 H316

May cause respiratory irritation, Category 3 H335

Harmful if swallowed, Category 4 H303

Harmful to aquatic life, Category 4 H412

**INHALATION:** Not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating of this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

**INGESTION:** May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury.

**EYE CONTACT:** May cause irritation.

**SKIN CONTACT:** May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

**MEDICAL CONDITIONS AGGREGATED BY EXPOSURE:** Individuals with pre-existing respiratory tract (nose, throat, and lungs) eye and/or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

**POTENTIAL ENVIRONMENTAL EFFECTS:** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Wt. Percent	Component	Synonym	CAS#
0-98	Highly refined petroleum lubricating oil	Lubricating oil base stock	Various*
0 – 9	Mineral Oil	N/A	Mixture
0.50-1.50	Zinc dialkyl dithiophosphate	N/A	68649-42-3

**Component Related Regulatory Information**

\*Highly refined petroleum lubricating oil contains one or more CAS numbers listed as follows:

64741-88-4, 64742-52-5, 64742-54-7, 64742-55-8, 64742-65-0, 64742-57-0, 64742-01-4, 64742-62-7, 72623-83-7

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#### 4. FIRST AID MEASURES

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**INHALATION:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**EYE CONTACT:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, flush with water for at least 15 minutes. If irritation persists, obtain medical assistance.

**SKIN CONTACT:** Remove affected clothing and shoes. Wash with soap and water until no odor remains. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency. Wash clothing before reuse.

**INGESTION:** Do NOT induce vomiting. Immediately get medical attention. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

**NOTE TO PHYSICIANS:** Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident.

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#### 5. FIRE FIGHTING MEASURES

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**FLASHPOINT (METHOD):** 275°F (135°C) (minimum) (Pensky-Martens)

**FLAMMABLE LIMITS IN AIR:** N/A

**AUTO-IGNITION TEMP:** N/A

**HAZARDOUS COMBUSTION PRODUCTS:** Decomposition and combustion materials may be toxic.

Burning may produce sulfur oxides, aldehydes, ketones, carbon monoxide and unidentified organic compounds.

**EXTINGUISHING MEDIA:** Water spray, water fog, dry chemical, carbon dioxide (CO<sub>2</sub>), foam. Water or foam may cause frothing.

**HAZARD RATING**

0 = LEAST  
1 = SLIGHT  
3 = MODERATE  
4 = HIGH  
5 = EXTREME

**NFPA 704 HAZARD IDENTIFICATION**

HEALTH HAZARD (BLUE)	1
FIRE HAZARD (RED)	1
REACTIVITY (YELLOW)	0
SPECIFIC HAZARD (WHITE)	

**PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:** A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

**FIRE FIGHTING INSTRUCTIONS:** Keep storage containers cool with water spray.

**FIRE AND EXPLOSION HAZARDS:** Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

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#### 6. ACCIDENTAL RELEASE MEASURES

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**SPILLS OR LEAKS:** Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Contain spill. Use personal protective equipment stated in Section 8. Keep unnecessary and unprotected personnel from entering the release area. Ventilate area and avoid breathing vapor or mist. Advise EPA, state agency. Absorb on inert material, shovel, sweep or vacuum spill. For large spills; dike far ahead of liquid spill for collection and later disposal.

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## 7. HANDLING AND STORAGE

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**HANDLING:** Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. This product has a low vapor pressure and is not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, do not breathe vapor or mist. Use in a well-ventilated area. Avoid contact with eyes, skin, clothing and shoes.

**SHIPPING/STORING:** Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain residue and can be dangerous.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### EXPOSURE GUIDELINES:

#### COMPONENT EXPOSURE LIMITS

##### Highly Refined Petroleum Lubricating Oil

ACGIH: 5mg/m<sup>3</sup> TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
10 mg/m<sup>3</sup> STEL (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
OSHA Final: 5 mg/m<sup>3</sup> TWA (related to Oil mist, mineral)  
OSHA Vacated: 5mg/m<sup>3</sup> TWA (related to Oil Mist, mineral)  
NIOSH: 5mg/m<sup>3</sup> TWA (related to Oil Mist, mineral)  
10mg/m<sup>3</sup> STEL (related to Oil mist, mineral)

##### Mineral Oil

ACGIH: 5mg/m<sup>3</sup> TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
10 mg/m<sup>3</sup> STEL (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
OSHA Final: 5mg/m<sup>3</sup> TWA (related to Oil Mist, mineral)

### ENGINEERING CONTROLS:

**VENTILATION:** Provide general ventilation to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below applicable exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT —

**EYE:** Where eye contact is likely, wear safety glasses; contact lens use is not recommended.

**SKIN:** Protective gloves recommended when prolonged skin contact cannot be avoided. Use of natural rubber or equivalent gloves is not recommended. When product is heated and skin contact is likely, wear heat-insulating gloves, boots, and other protective clothing. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant face shield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

**RESPIRATOR:** No respiratory protection is normally required. Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

**PERSONAL HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with these products.

**OTHER:** Where spills and splashes are likely, facilities storing or using these products should be equipped with emergency eyewash and shower, both equipped with clean water, in the immediate work area.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**APPEARANCE/ODOR:** AMBER FLUID/PETROLEUM ODOR. **BOILING POINT:** N/D  
**VAPOR PRESSURE:** LESS THAN 1 MM HG AT 68<sup>0</sup> F (20<sup>0</sup> C) **MELTING POINT:** N/D  
**MOLECULAR WEIGHT:** N/D **PACKING DENSITY:** N/D  
**SOLUBILITY IN WATER:** INSOLUBLE **OCTANOL/WATER COEFF:** N/D  
**EVAPORATION RATE:** N/A ) **ODOR THRESHOLD:** N/D  
**RELATIVE DENSITY:** 0.876 G/CM<sup>3</sup> AT 60<sup>0</sup> F (15.5<sup>0</sup> C) **VAPOR DENSITY:** N/D  
**SPECIFIC GRAVITY:** 0.876 (ESTIMATED) (WATER=1) (APPROXIMATELY)  
**FLAMMABILITY:** N/D **AUTOIGNITION TEMPERATURE:** N/D  
**FLASH POINT:** 275<sup>0</sup> F (135<sup>0</sup> C) (MINIMUM) (PENSKEY-MARTENS)  
**FLAMMABLE LIMITS IN AIR:** LOWER: N/D UPPER: N/D

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**10. STABILITY AND REACTIVITY**

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**STABILITY:** Stable under normal temperatures and pressures.  
**INCOMPATIBLE MATERIALS:** Avoid oxidizing agents and reducing agents.  
**REACTIVITY:** Polymerization is not known to occur under normal temperatures and pressures. Not reactive in water.  
**CONDITIONS TO AVOID:** Avoid sparks and open flames.  
**HAZARDOUS DECOMPOSITION:** None under normal temperatures and pressures. Also see Section 5:  
**HAZARDOUS COMBUSTION PRODUCTS.**

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**11. TOXICOLOGICAL INFORMATION**

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**FOR THE PRODUCT - INHALATION:** Low acute toxicity. **SKIN:** expected to be acutely non-toxic if absorbed. M irritation with prolonged/repeated contact. **EYE:** Mildly irritating on contact.  
**INGESTION:** Practically non-toxic  
**SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL – INHALATION:** low acute toxicity. **SKIN:** practically non-toxic; if absorbed may cause moderate irritation with prolonged and repeated contact. **EYE:** minimally irritating on contact. **INGESTION:** Practically non-toxic if swallowed.  
**ACUTE EFFECTS:** May be harmful if swallowed. May irritate eyes and skin. May cause throat irritation, nausea, vomiting and diarrhea. Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.  
**REPEATED DOSE EFFECTS:** Prolonged or repeated inhalation or oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause may cause drying, cracking, redness, itching, and/or swelling (dermatitis).  
**SENSITIZATION:** Based on best current information, there is no known human sensitization associated with this product.  
**MUTAGENICITY:** Based on best current information, there is no known mutagenicity associated with this product.  
**CARCINOGENICITY** – Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized by ACGIH A1 of A2 substances; as categorized by IARC Group 1 Group 2A. or Group 2B agents as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.  
**REPRODUCTIVE TOXICITY** – No information available.  
**TERATOGENICITY** – No information available.  
**NEUROTOXICITY** – High vapor/aerosol concentrations (attainable only at elevated temperatures) may cause central nervous system effects such as dizziness, drowsiness or headaches.

**TOXICITY DATA:**

**Component Analysis – LD50/LC50**

**Mineral Oil**

Dermal LD50 Rabbit >5000 mg/kg

Oral LD50 Rat >5000 mg/kg

**Zinc dialkyl dithiophosphate (68649-42-3)**

Dermal LD50 Rat >2000 mg.kg

Oral LD50 Rat >2000 mg/kg

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**12. ECOLOGICAL INFORMATION**

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**ECOTOXICITY** - Material may be harmful to aquatic organisms. May cause long term adverse effects in aquatic environments.

**PERSISTENCE/DEGRADABILITY** – Not readily biodegradable.

**BIOACCUMULATIVE POTENTIAL** - No information available for this product.

**MOBILITY IN ENVIRONMENT** – Base oil component(s) – Low solubility and floats; expected to migrate from water to land.

**OTHER ADVERSE EFFECTS** – N/A

**OCTANOL/WATER PARTITION COEFFICIENT** – N/A

**VOLATILE ORGANIC COMPOUNDS** - Negligible

**AQUATIC RELEASE** - Advise authorities if product has entered or may enter watercourses or sewer drains.

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**13. DISPOSAL INFORMATION**

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**DISPOSAL:** Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

**USEPA WASTE CODES;** This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, it must be managed in accordance with 40 CFR Part 279. Processing, use, or contamination by user may change the waste code(s) applicable to the disposal of this product.

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**14. TRANSPORTATION INFORMATION**

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**DOT**

**PROPER SHIPPING NAME** Petroleum Lubricating Oil

**HAZARD CLASS:** Not regulated

**ID NUMBER:** Not regulated

**LABEL REQUIRED:** Not regulated

**EMERGENCY RESPONSE:** N/A Reference North American Emergency Response Guidebook.

**IATA:** Not regulated

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**15. REGULATORY INFORMATION**

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**TSCA:** All components of this product are listed in **Section 3** are exempted from the TSCA requirements.

**SARA SECTIONS 302 304:** Based on the ingredients listed in **Section 3**, this product does not contain any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA SECTIONS 311 AND 312 REPORTING:** This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of Sections 311 and 312 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SAEA):

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Physical Fire	No
Physical Sudden Release of Pressure	No
Physical Reactive	No

**SARA SECTION 313:** This product contains the following chemical(s) subject to the supplier notification requirements of the SARA 313 Toxic Release Program

**Zinc dialkyl dithiophosphate 0.5 – 1.5**

**CERCLA:** Based on the ingredients listed in **Section 3**, this product does not contain any “hazardous substances” listed pursuant to the comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

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**16. OTHER INFORMATION**

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**DATE ISSUED:** January 30, 2015  
**SUPERSEDES:** July 14, 2013  
**REVISION NO.** 1  
**REVISION INFORMATION:** GHS Compliance  
**SDS #:** CODE 525

**LUBRICANTS LLC**  
**6 HORWITH DRIVE**  
**NORTHAMPTON, PA 18067**  
**484-275-7990**

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