Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name: **PSL300 NP**
Synonyms: Synthetic polyolester based lubricant with engineered fiber,
Fatty acids, C5-C10, mixed esters with 3-Methylbutanoic acid
Product Use: Bearing Lubricant System

Supplier/Manufacturer: **Permawick Company**
255 E. Brown Street, Suite 100
Birmingham, Michigan 48009
Phone: (248)433-3500 Fax (248)594-3433

Emergency Phone Numbers:

(812) 376-0703 -- Monday - Friday, 8 am – 4:30pm (EST)
Chemtrec 24 hr.: (800) 424-9300 (US and Canada)

Information Contacts: For technical information contact your sales representative.

Section 2. Composition / Information on Ingredients

Criteria for Listing Components in the Composition Section:
Carcinogens are listed when present at 1.0% or greater.
Components hazardous according to OSHA are listed when present at 1.0% or greater. Non-hazardous components are listed at 3.0% or greater.
This is not intended to be a complete compositional disclosure.

Hazardous classification:

	CASRN	**Percent (by wt.)**	**HAZARD Exposure Limits**
Synthetic ester base-stock	68424 - 32 -8	64 -69.0	None noted
Woden Fiber	**********	14 -19	None noted
Acrylic Copolymer	********	< 3.7	None noted
Interchangeable Neutral Oils	64742-65-0	< 9.0	OSHA TWA: 5 mg/m^3 (oil mist) ACGIH TWA: 5 mg/m^3 (oil mist) ACGIH STEL: 10 mg/m^3 (oil mist)
Tricresyl Phosphate	1330-78-5	0-2.99	Delayed hazard

See section 8 for Exposure Guidelines

Section 3. Hazards Identification

******Emergency Overview******

This compound is not an acute or physical hazard under normal conditions of use. Under fire conditions there is a possibility of toxic phosphorous oxide vapors being released.

Potential Health Effects, Signs and Symptoms of Exposure:

Inhalation: Irritation possible. Fumes from heated material may cause irritation. Sprays or mists may be irritating to the upper respiratory tract.

Ingestion: May cause gastrointestinal irritation.

Eye Contact: Irritating. May cause tearing, reddening, or swelling.

Skin Contact: Prolonged or repeated contact may result in defatting, and / or drying of the skin which may lead to skin irritation and dermatitis. Harmful if absorbed through the skin.

Medical Conditions aggravated by exposure: None

Section 4. First Aid Measures

FIRST AID

Eye Contact: Immediately flush eyes with plenty of water. If irritation develops or persists seek medical attention immediately.

Ingestion: Call a physician or poison control center immediately. Only induce vomiting at the instruction of a physician.

Inhalation: Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration, preferably by mouth to mouth. Get medical attention immediately.

Skin Contact: Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and wash clothing before reuse. If symptoms occur obtain medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point:	495 F	Method used:	ASTM D92
Autoignition Point:	> 600 F		
Lower explosive limit:	not available	Upper explosive limit:	not available
NFPA rating:	none		

Other Flammable Properties:

Can burn in a fire and form decomposition products such as carbon dioxide, carbon monoxide, oxides of sulfur, phosphorus and nitrogen, small amounts of aromatic and aliphatic hydrocarbons.

Extinguishing Media:

Water spray or fog, foam, dry chemical or CO2

Fire Fighting Precautions and Procedure:

Firefighters should wear self - contained breathing apparatus (MSHA/NIOSHA approved or equivalent) in the positive - pressure mode with full protective gear especially when there is the possibility of exposure to smoke, fumes or hazardous decomposition of products. Frothing may occur and may be quite violent. Water spray carefully applied has frequently been used with success in extinguishing such fires by causing the frothing to occur only on the surface and this foaming action blankets and extinguishes the fire. (NFPA 325M - 1984) Containers can build up pressure if exposed to heat (fire). Cool with water spray.

Section 6. Accidental Release Measures

Spill or Release Procedures:

Ventilate area. Absorb spill with inert material and place in appropriate chemical waste container. Obey any federal, state, and local laws and regulations. Do not flush into sewers discharging into domestic water systems or natural waterways. Use personal protective equipment (Sec.8). Spilled material will cause a slippery surface. Avoid trips and falls.

Section 7 . Handling and Storage

Handling:

Thoroughly wash after handling. Use adequate ventilation and avoid breathing vapor or mist. Avoid contact with eyes, skin, clothing. Mix well before use.

Storage:

Keep container tightly closed when not in use and during transport. Store in cool, dry place. Keep from freezing.

Section 8. Exposure Controls / Personal Protection

Engineering Controls: Adequate ventilation must be provided.

Personal Protective Equipment:

Eye / Face Protection:	Use chemical splash goggles.
Skin Protection:	Wear impermeable gloves to minimize skin contact.
Respiratory Protection:	Where exposure is likely to exceed acceptable criteria, use NIOSH/OSHA approved respiratory equipment. Respirators should be selected based on the form and concentration of contaminant in air with OSHA concentration of contaminant in air and in accordance with OSHA (29 CFR 1910.134).
Other Protective Equipment:	In order to identify additional Personal Protective Equipment requirements, the recommendation is made that a hazard assessment in accordance with the OSHA PPE Standard (29 CFR 1910.132) be conducted before product use.

Section 9. Physical and Chemical Properties

Boiling Point	:	>540 F @ 760 mm Hg pressure
Pour Point	:	-65 F (ASTM D-97)
Vapor Pressure	:	< 0.05 mm Hg @ 300 F
Vapor Density (Air = 1)	:	heavier than air
Specific Gravity	:	1.007 @ 60 / 60 F
Density	:	see specific gravity
pH	:	Not available
Viscosity	:	300 SUS @ 100 F
Evaporation Rate	:	slower than Butyl Acetate
Solubility in water	:	Negligible
Appearance and color	:	Clear liquid
Odor	:	mild ester odor

Section 10. Stability and Reactivity

Stability: Stable under normal storage conditions.

Hazardous Polymerization: Will not occur during normal conditions.

Conditions to avoid: Mechanical impact: none
Static discharge: none

Material Incompatibility: Avoid oxidizing and reducing agents.

Hazardous Decomposition Products:
Carbon dioxide, carbon monoxide, oxides of sulfur and nitrogen. (See Sec. 5)

Section 11. Toxicological Properties

Inhalation: LC50 (rats) No deaths occurred at 8.3 mg/l

Ingestion: LD50: > 5 g/kg (rat) (similar products) Ames test: Non - mutagenic

Carcinogens: no NTP: no IARC: no

Other Toxicological Information: Not available

Section 12. Ecological Information

Ecological Fate: No data available

Environmental Effects: 96 hr. LC50 (Rainbow trout) = 0.75 (0.54 - 1.04) mg/l (ICG/T79-069)
96 hr. LC50 (Fathead minnow) = 100 mg/l (ICG/T79 - 069)
48 hr. LC50 (Daphnia Magna) = 0.27 mg/l (ICG/T79 - 069)
96 hr. LC50 (Bluegill Sunfish) = 7000 mg/l (ICG/T79 - 069)

Section 13. Disposal Considerations

Disposal Method: All recovered material should be packaged, labelled, transported, and disposed or reclaimed in accordance with federal, state and local regulations. Incineration is the preferred method. Reclaim where possible.

Section 14. Transportation Information

U.S. Department of Transportation:

DOT proper shipping name: not regulated
DOT classification: not regulated

Section 15. Regulatory Information

U.S. Federal Regulations

OSHA:

Preparation of this document is in accordance with the MSDS requirements of the OSHA Hazard Communication Standard.

SARA Section 311 / 312: Hazard classification: none

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: none

TSCA:

This product or its components are listed in the TSCA inventory.
This product contains the following substances subject to export notification under Section 12 (b) of TSCA: None

CERCLA Hazardous Materials: None noted

State Regulations: None

Section 16. Other Information

HMIS Rating System: Health = 2 Flammability = 1 Reactivity = 0
Ratings key: 4 = Highest hazard, 0 = Lowest hazard, * = Chronic Health Hazard

Revision summary:

This is the first issue of this MSDS in the ANSI Z400.1 - 1993 format.
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Supersedes: 03/01/96

This information presented herein is believed to be factual as it has been derived from works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as warranty or representation for which Permawick bears legal responsibility. Any recommendations should be reviewed by the user in the specific context of the intended use to determine whether they are appropriate.

ACGIH: American Conference of Governmental Industrial Hygianists
ANSI: American National Standards Institute

CERCLA:	Comprehensive Emergency Response, Compensation and Liability Act
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
OSHA:	Occupational Health and Safety Administration
PEL:	OSHA Permissible Exposure Limit
RCRA:	Resource Conservation and Recovery Act
SARA:	Superfund Amendment and Reauthorization Act
STEL:	Short Term Exposure Limit
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act