Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name: **P2AO60 Permawick**
Synonyms: Synthetic Polyalphaolefin mixture with engineered fiber
Product Use: Synthetic plastic compatible wick lubricating system

Supplier / Manufacturer:

Permawick Company
255 E. Brown Street, Suite 100
Birmingham, Michigan 48009
Tel(248) 433-3500 Fax:(248) 433-1824

Emergency Phone Numbers:
(812) 376-0703 -- Monday - Friday, 8 am - 5 pm (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 at 0.1% or greater.
Components considered hazardous by OSHA are listed 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*
1.	Permawick fiber	Proprietary	10-20%	none Noted
2.	1-Decene, Dimer, Hydrogenated	68649-11-6	25-35.0 %	none noted
3.	1-Decene, Homopolymer, Hydrogenated	68037-01-4	45.0-55%	none noted

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. However, inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation. Harmful if aspirated into lungs.

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. Harmful if aspirated into lungs.

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. May cause allergic skin reactions.

Other chronic effects: Refer to Section 11, Toxicological Information for details.

Section 4. First Aid Measures

FIRST AID

Eye Contact: Immediately flush eyes with plenty of water. Hold eyelids apart for at least 15 minutes with running water. If irritation develops or persists seek medical attention immediately.

I*ngestion*: If victim is alert give 3 - 4 glasses water to drink to dilute the product. DO NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation: Immediately remove victim to fresh air. Get medical attention immediately if respiratory irritation develops or if breathing becomes difficult.

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

Medical Conditions Aggravated by Exposure:
Existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Preexisting skin conditions, allergies and eczema. Treat symptomatically.

Section 5. Fire Fighting Measures

Flash Point:	320°F	Method used:	ASTM D92
Autoignition Point:	not determined		
Flammability Classification:	not flammable		
Lower explosive limit:	not available	Upper explosive limit:	not available
NFPA rating:	none		

Other Flammable Properties:

Can burn in a fire and form carbon dioxide and some carbon monoxide. Decomposition and combustion products may be toxic.

Extinguishing Media:

Water mist or fog, agents approved for Class B hazards (e.g. dry chemical, carbon dioxide, foam, steam). Water or foam may cause frothing.

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. Prevent spreading by diking or ditching. 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 and before eating, drinking, or using tobacco products,. Use adequate ventilation and avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Avoid ingestion.

Storage:

Keep container tightly closed when not in use and during transport. Store under dry conditions and at temperatures between 10°C and 50°C.

Section 8. Exposure Controls / Personal Protection

Exposure Limits:

Component Information		***OSHA***			***ACGIH***	
No.	***Units***	***TWA***	***STEL***	***PEL***	***TWA***	***STEL***
1.	mg/m^3	none established			none established	
2.	mg/m^3	none established			none established	

Carcinogens: IARC: None NTP: None OSHA: None

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

Other Protective Equipment: 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).

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.

Work Practice controls:

1. Wash exposed skin promptly to remove any material.
2. Wash hands and face before consuming food, drinking, or before using tobacco products.
3. Do not store food, drink, tobacco products in the same area where the product is stored.

Section 9. Physical and Chemical Properties

Boiling Point	:	Not determined
Pour Point	:	< -85°F (ASTM D-97)
Vapor Pressure	:	< 1 mm Hg @ 300°F
Vapor Density (Air = 1)	:	heavier than air Specific
Gravity	:	0.811 @ 60 / 60°F Density
	:	see specific gravity
pH	:	Not available
Viscosity	:	61 SUS @ 100°F
Evaporation Rate	:	slower than Butyl Acetate
Solubility in water	:	Negligible
Appearance and color	:	Clear liquid
Odor	:	odorless

Section 10. Stability and Reactivity

Stability: Stable under normal storage conditions

Hazardous Polymerization: Will not occur during normal conditions

Conditions to avoid: Temperature conditions which induce thermal decomposition.

Material Incompatibility: Avoid oxidizing agents, strong acids, and strong bases.

Hazardous Decomposition Products:

Carbon dioxide carbon monoxide, nitrogen and phosphorus oxides and other toxic compounds.

Section 11. Toxicological Properties

Inhalation: No test data found on this product.

Ingestion: LD50: > 5 g/kg (rat) (similar products)

Eye Contact: Rabbit: Slight irritation

Skin Contact: Rabbit: irritant

Chronic Toxicity: No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

Other Toxicological Information: *Not available*

Section 12. Ecological Information

Ecological Fate: No data available

Environmental Effects: No data available

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.

EPA Hazardous Waste: None

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 302:

This product contains no chemicals regulated under Section 302 as extremely hazardous substances.

SARA Section 311 / 312:

Hazard classification: none noted

SARA Section 313:

This product contains no chemical requiring annual Toxic Chemical Release Reporting under Section 313.

TSCA:

Section 8 (b): Inventory:
All functional components of this product are listed in the TSCA inventory.
Section 12 (b): Export Notification:
This product does not contain any substances subject to export notification under Section 12 (b) of TSCA.

CERCLA Hazardous Materials: None

RCRA:

This product is not considered to be hazardous waste under RCRA (40 CFR 261).

AICS: Australian Inventory:

This product contains only chemicals which are currently listed on the Australian Inventory of Chemical Substances.

CDSL: Canadian Inventory

All the chemicals in this product are listed on the DSL.

EINECS: European Inventory:

All the chemicals in this product are listed on the European Inventory of Existing Commercial Chemical Substances.

MITI: Japanese Inventory:

All the chemicals in this product are listed on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

KCSL: Korean Inventory:

This product only contains chemicals which are currently listed on the Korean Chemical Substances List.

PICCS: Philippine Inventory: Not determined.

State Regulations

This product does not contain any components that are regulated under California Proposition 65.

US Federal Regulations:

Clean AIR ACT: O.D.S.:

This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (O.D.S.). We have relied on our suppliers labeling their products.

Section 16. Other Information

HMIS Rating System: Health = 1 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 -
Approval date: 01/23/97
Supersedes: 09/1/89

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 Hygienists
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
OSHA:	Occupational Health and Safety Administration
NTP:	National Toxicology Program
PEL:	OSHA Permissible Exposure Limit
RCRA:	Resource Conservation and Recovery Act
SARA:	Superfund Amendment Reauthorization Act
STEL:	Short Term Exposure Limit
TLV:	Threshold Limit Values
TSCA:	Toxic Substances Control Act