

SAFETY DATA SHEET

Engine Storage Oil

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

PRODUCT NAME:	Engine Storage Oil
PRODUCT NUMBER:	9-ESO
RECOMMENDED USE:	Aircraft coatings and cleaners
RESTRICTIONS ON USE:	Not applicable
SUPPLIER:	Poly-Fiber, Inc. P.O. Box 3129, Riverside, CA 92519, USA 4343 Fort Drive, Riverside, CA 92509, USA (951) 684-4280 (951) 809-7144 (760) 782-1947
EMERGENCY TELEPHONE:	(800) 424-9300 (Chemtrec- US) (703) 527-3887 (International – Call Collect)

2 - HAZARDS IDENTIFICATION

CAUTION: Prolonged or repeated skin contact may cause drying, cracking, or irritation. Rags, steel wool, or waste soaked with linseed oil may spontaneously catch fire if improperly discarded.

GHS Hazard Category

Flammable liquid-	Category 1
Eye Irritation -	Category 2A
Skin Irritation-	Category 2
Respiratory Irritation-	N/R
Specific target organ toxicity (single exposure) –	N/R


Label Elements: None

Pictograms:



Signal Word: **WARNING**

Hazard Statements

 **WARNING:** This product can expose you to chemicals including Phosphorodithioic Acid, 0,0-DI C1-14-Alkyl Esters. ZINC Salts (2:1) (ZDDP) 68649-42-3, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

CAUTION: Prolonged or repeated skin contact may cause drying, cracking, or irritation. Rags, steel wool, or waste soaked with linseed oil may spontaneously catch fire if improperly discarded.

Precautionary Statements

Do not ingest.

Prevention

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store in a well-ventilated place. Keep container tightly closed. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors/spray. Use only outdoors or in a well-ventilated area. Vapors may cause drowsiness and dizziness.

Response**INHALATION:**

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

INGESTION:

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

SKIN CONTACT:

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomforts persist.

EYES CONTACT:

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

Storage

Store in a well-ventilated Place. Keep container tightly closed. Keep cool. Store in a locked cabinet, cage or room.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Mild Irritating to eyes and skin.

3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	Classification (67/548/EEC)
Lubricant Base Oils	Not Available	Not Available	80-90%	Not classified as hazardous
Phosphorodithioic Acid, O,O-Di C1-14-Alkyl Esters, Zinc Salts (2:1) (ZDDP)		68649-42-3	0-10%	GHS: H315, H318, H401, H411
Sulfonic Acids, Petroleum, Calcium Salts	263-093-9	61789-86-4	0-10%	GHS: H315, H318, H317

The Full Text for all H-Statements and P-Statements is displayed in Section 15

COMPOSITION COMMENTS

The data shown are in accordance with the latest EC Directives.

4- FIRST AID MEASURES**NOTICE:**

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Breathing the vapor may irritate the nose and throat. Central nervous system effects including excitation, euphoria, contracted eye pupil, dizziness, blurred vision, fatigue, nausea, headache, loss of consciousness, respiratory arrest and sudden death could occur as a result of long term and/or high concentration exposure to vapors.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Contact with the skin or eyes may cause irritation. Flush skin and eyes with water for at least 15 minutes. Prolonged or repeated contact can cause moderate irritation, defatting, and/or dermatitis.

INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE:

This product may aggravate preexisting eye, skin, heart, central nervous system and respiratory disorders.

HEALTH HAZARDS (ACUTE AND CHRONIC):

Overexposure may cause anesthesia, headache, nausea or dizziness. Breathing the vapors may irritate the nose and throat. Detectable amounts of chemicals or substances known to the state of California to cause cancer, birth defects, or other reproductive harm may be found in this product. Use care when handling chemical and petroleum products.

CARCINOGENICITY: NTP CARCINOGEN: IARC MONOGRAPHS : OSHA REGULATED :

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT:

Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes:

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin:

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing:

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation:

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

5- FIRE FIGHTING PROCEDURES**EXTINGUISHING MEDIA:**

Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

SPECIAL FIREFIGHTING PROCEDURES:

Do not use a direct stream of water. Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel. Decomposition products may form toxic materials such as Aldehydes, Oxides of carbon, Smoke, Fume, Sulfur oxides, incomplete combustion products.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point.

6-ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS:**

Wear protective clothing as described in Section 8.

ENVIRONMENTAL PRECAUTIONS:

Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.

SPILL CLEANUP METHODS:

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

7-HANDLING AND STORAGE**USAGE PRECAUTIONS:**

Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level.

STORAGE PRECAUTIONS:

FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120°F.

STORAGE CLASS:

Not Flammable

8-EXPOSURE CONTROL/PERSONAL PROTECTION

Name	Workplace Exposure Limits	Remarks
SULFONIC ACIDS, PETROLEUM, CALCIUM SALTS	ACGIH: 5mg/m ³ TLV NIOSH: Not listed OSHA-Final PELs: 5mg/m ³	Consult local authorities for acceptable exposure limits.
Phosphorodithioic Acid, O,O-Di C1-14-Alkyl Esters, Zinc Salts (2:1) (ZDDP)	ACGIH: Not listed NIOSH: Not listed OSHA-Final PELs: Not listed	Same As Above



PROTECTIVE EQUIPMENTS:
 PROCESS CONDITIONS:
 ENGINEERING MEASURES:
 RESPIRATORY EQUIPMENT:
 HANDPROTECTION:
 EYE PROTECTION:
 OTHER PROTECTION:
 HYGIENE MEASURES:

Provide eyewash station.
 Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.
 Wear respirator with appropriate cartridge for organic solvents and chemicals.
 Wear approved gloves such as Neoprene, Nitrile or Rubber types.
 Wear splash-proof goggles.
 Wear appropriate clothing to prevent any possible skin contact.
 DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid
 COLOR: Amber
 ODOR: Mild
 BOILING POINT: 600 ° F
 RELATIVE DENSITY: 0.884 g/mL
 VAPOR DENSITY: Heavier than air
 FLASH POINT: 425° F (218° C) (Closed Cup)
 FLAMMABILITY LIMITS: LOWER: 0.9 UPPER: 7.0
 SOLUBILITY VALUE (g/100g H₂O @ 20°C): Insoluble
 VOLATILE ORGANIC COMPOUND (VOC): 1 g/L

10- STABILITY AND REACTIVITY

STABILITY:
 Stable
 CONDITIONS TO AVOID:
 Heat and fires. Ignition sources
 INCOMPATIBILITY (MATERIALS TO AVOID):
 Strong alkalis or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings.
 HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
 Carbon monoxide.
 HAZARDOUS POLYMERIZATION:
 Will not occur.

11-TOXICOLOGICAL INFORMATION

Sulfonic Acids, Petroleum, Calcium Salts (CAS#61789-86-4):

INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
Ingestion	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	Mildly irritating to skin with prolonged exposure. Based on assessment of the components.
Eye	
Serious Eye Damage/Irritation: No end point data for material.	Irritating and will injure eye tissue. Based on assessment of the components.
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.

Skin Sensitization: No end point data for material.	May cause allergic skin reaction. Based on assessment of the components.
Aspiration: Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
Carcinogenicity: No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
Reproductive Toxicity: No end point data for material.	Not expected to be a reproductive toxicant. Based on assessment of the components.
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

Phosphorodithioic Acid, O,O-Di C1-14-Alkyl Esters, Zinc Salts (2:1) (ZDDP) (CAS#68649-42-3):

Toxicity:

LC50 Rabbit Dermal Acute No data in literature

LC50 Rat Inhalation No data in literature

LD50 Rat Oral 26100 mg/kg

Skin corrosion/irritation: May be irritating to the skin

Serious eye damage/eye irritation: May be irritating to eyes.

Respiratory or skin sensitization:

Respiratory sensitization: This product is not expected to cause respiratory sensitization.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity single exposure : Not classified as a specific target organ toxicity –single exposure.

Specific target organ toxicity repeated exposure: Not classified as a specific target organ toxicity -repeated exposure.

Chronic effects: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Further information: This product has no known adverse effect on human health. Aspiration toxicity Not expected to be an aspiration hazard

12- ECOLOGICAL INFORMATION

Sulfonic Acids, Petroleum, Calcium Salts (CAS#61789-86-4):

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Base oil component -- Expected to be inherently biodegradable

BIOACCUMULATION POTENTIAL

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Phosphorodithioic Acid, O,O-Di C1-14-Alkyl Esters, Zinc Salts (2:1) (ZDDP) (CAS#68649-42-3):

Ecotoxicity: Very toxic to aquatic life with very long term effects

Toxic to Fish: 96h LC50: 1.0 – 5.0 mg/L (Pimephales promelas), 48h EC50: 1.0 – 1.5 mg/L - Daphnia Magna (Water Flea)

Persistence and Degradability No information available.

Bioaccumulation No information available

Other adverse effects No information available.

13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

I certify that all chemicals in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

14 – TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: PETROLEUM OIL
PRIMARY HAZARD CLASS/DIVISION: N/A
UN/UA NUMBER: N/A
PACKING GROUP: N/A

IMO PROPER SHIPPING NAME: PETROLEUM OIL
IMO UN CLASS: N/A
IMO UN NUMBER: N/A
IMO PACKING GROUP: N/A
IMO LABEL: N/A
IMO VESSEL STOWAGE: N/A

Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.



GHS LABEL:

WARNING

VAPOR HARMFUL. CAUSES SERIOUS EYE IRRITATION. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.

Refer to SDS for additional information on safe handling / use. - Keep out of reach of children. For Industrial Use Only.

Contains: Lubricant Base Oils (80-90%), Phosphorodithioic Acid, O,O-Di C1-14-Alkyl Esters, Zinc Salts (2:1) (ZDDP) (0-10%), and Sulfonic Acids, Petroleum, Calcium Salts (0-10%). This product contains one or more chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

Hazard Statements: May cause allergic skin reaction. Causes serious eye irritation.

Precautionary Statements: Avoid breathing mist / vapours. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves and eye / face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Dispose of contents and container in accordance with local regulations

First Aid: Inhalation - Move person to fresh air. If symptoms occur obtain medical attention. **Skin Contact** - Wash affected skin with soap and water. If symptoms occur obtain medical attention. **Eye Contact** - If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms occur obtain medical attention. **Ingestion** - Do not induce vomiting. Drink one glass of water. If symptoms occur obtain medical attention.

15 – REGULATORY INFORMATION

Hazard Statements: May cause allergic skin reaction. Causes serious eye irritation.

Precautionary Statements: Avoid breathing mist / vapours. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves and eye / face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Dispose of contents and container in accordance with local regulations.

H-Statements:

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H318: Causes serious eye damage

H401: Toxic to aquatic life

H411: Toxic to aquatic life with long lasting effects

P-Statements:

P261: Avoid breathing mist / vapours.

P264: Wash skin thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves and eye / face protection.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P501: Dispose of contents and container in accordance with local regulations.

16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.