

Prod.Name: OEM DIFFERENTIAL GEAR LUBE EP
SAE 80W-90
Manufacturer: SOPUS Products
HMCS ID: 357481
SUC: 04 - Metal Working Fluids and Lubricants

MATERIAL SAFETY DATA SHEET

Revision: 09.Jul.2008
Effective: 09.Jul.2008
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1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT INFORMATION

Product Name: OEM DIFFERENTIAL GEAR LUBE EP SAE 80W-90

Product Code: 59425E

External Keys:

89021669 Distributable Material (Part #)
Axle Lubricant Primary Tradename - Distributable Material
SAE 80W-90 API
GL-5

MANUFACTURER INFORMATION

Manufacturer: SOPUS Products

Address:

700 Milam	USA	Texas	77002-2806	Houston	PO Box	Mailing
					4427 (Zip:	
					77210-	
					4427)	

Communication Lines:

Phone	877-242-7400	Spill information
Phone	877-504-9351	Health information
Phone	877-276-7285	MSDS Assistance
Internet	www.pennzoil-quakerstate.com	Website (with MSDS for SOPUS Products)

2 INGREDIENT INFORMATION

FORMULATION

Ingredients:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Prefix</u>	<u>Value</u>	<u>Unit</u>	<u>Exposure Limits</u>
HIGHLY REFINED MINERAL OILS	989987-80-2	<	100	% Wt	No
ADDITIVES	989922-74-6	<	100	% Wt	No

Comment:

Highly refined mineral oils and additives.
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

3 HAZARDS IDENTIFICATION

Hazards Overview:

Emergency Overview
Appearance and Odour : May be dyed. Liquid at room temperature. Slight hydrocarbon.
Health Hazards : Not classified as dangerous for supply or conveyance.
Safety Hazards : Not classified as flammable but will burn.
Environmental Hazards : Not classified as dangerous for the environment.

Specific Hazards (Routes Of Exposure):

<u>Exposure Routes</u>	<u>Exposure Duration</u>	<u>Observation</u>
Skin Contact	General	Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas.
Eye Contact	General	May cause slight irritation to eyes.
Inhalation	General	Under normal conditions of use, this is not expected

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3 HAZARDS IDENTIFICATION

Specific Hazards (Routes Of Exposure):

<u>Exposure Routes</u>	<u>Exposure Duration</u>	<u>Observation</u>
Ingestion	General	to be a primary route of exposure. Low toxicity if swallowed. Ingestion may result in nausea, vomiting and/or diarrhea.

Medical Conditions Aggravated By Exposure:

Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Skin.

Additional Health Hazard Data:

Not expected to be a health hazard when used under normal conditions. Used oil may contain harmful impurities.
Sensitization : Not expected to be a skin sensitizer.
Repeated Dose Toxicity : Not expected to be a hazard.

Comment:

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

4 FIRST AID MEASURES

First Aid Procedures:

Not expected to be a health hazard when used under normal conditions.

First Aid By::

Inhalation	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin Contact	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye Contact	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Notes To Physician:

Treat symptomatically.

5 FIRE FIGHTING MEASURES

Flash Point:

= 662 °F COC Typical. 350 C.

Explosive Limits:

Lower Explosive Limit (LEL)	=	1	% Vol	based on mineral oil (989987-80-2)
Upper Explosive Limit (UEL)	R	10	% Vol	based on mineral oil (989987-80-2)

Autoignition Temperature:

> 608 °F 320 C.

Extinguishing Media:

Foam, water spray or fog. Dry chemical powder, carbon

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5 FIRE FIGHTING MEASURES

Extinguishing Media:

dioxide, sand or earth may be used for small fires only.

Non Suitable Extinguishing Media:

Do not use water in a jet.

Fire and Explosion Hazards:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Special Fire Fighting Procedures:

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6 ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IN CASE OF ACCIDENTAL RELEASE

Personal Precautions:

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Slippery when spilt. Avoid accidents, clean up immediately.

Environmental Precautions:

Prevent from spreading
or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
Local authorities should be advised if significant spillages cannot be contained.

SPILL OR LEAK PROCEDURES

Recovery:

Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Disposal:

See Chapter 13 for information on disposal. Observe all relevant local and international regulations.

7 HANDLING AND STORAGE

HANDLING

Safe Handling Procedures:

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling of this material.

Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

For containers or container linings, use mild steel or high density polyethylene.

Unsuitable Materials : PVC.

Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

Used oils may contain harmful impurities that have

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7 HANDLING AND STORAGE

HANDLING

Safe Handling Procedures:

accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

Prevention of Fire and Explosion:

Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

STORAGE

Storage Conditions:

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe storage of this material. Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Storage Temperature: 0 - 50 °C / 32 - 122 °F

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.

Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE):

Eye Protection Wear safety glasses or full face shield if splashes are likely to occur.

Skin Protection Skin protection not ordinarily required beyond standard work clothes.

Respiratory Protection No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment

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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE):

suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers.

Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65 °C (149 °F)].

Hand Protection Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g.US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.

Hygiene Measures:

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Special Precautions:

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical State: Liquid.

Odor: Slight hydrocarbon.

Comment:

May be dyed.

PHYSICAL PROPERTIES

pH Value:

Not
Applicable

Changes of State:

Pourpoint	=	14	°F	-10 C. Typical
Boiling Point	>	536	°F	280 C. estimated value(s)

Vapor Pressure:

< 0.5 pa at 20 °C / 68 °F (estimated value(s))

Vapor Density:

> 1 air=1 (estimated value(s))

Evaporation Rate:

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9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Evaporation Rate:

Not
Available

Density:

Density = 7.51 g/cm³ (cc) Typical

Specific Gravity:

= 0.885 Typical

Solubility:

Water Negligible

Viscosity:

Kinematic Viscosity = 400 mm²/s at 40 °C / 104 °F

Additional Chemical and Physical Data:

n-octanol/water partition coefficient (log Pow) > 6 based on information on similar products

10 STABILITY AND REACTIVITY

STABILITY INFORMATION

Stability Under Normal Conditions: Stable

Conditions to Avoid:

Extremes of temperature and direct sunlight.

Incompatible Materials:

STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION

Reactions:

<u>Type of Reaction</u>	<u>Reaction Products</u>
Thermal Decomposition	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
Decomposition	Hazardous decomposition products are not expected to form during normal storage.

11 TOXICOLOGICAL INFORMATION

SCIENTIFIC OBSERVATIONS

TOXICOLOGICAL EFFECTS

Product Data:

Route of Administration Comment Observed

Skin Contact Skin Irritation : Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Eye contact Expected to be slightly irritating.

Inhalation Inhalation of vapours or mists may cause irritation.

LETHAL LIMIT VALUES

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11 TOXICOLOGICAL INFORMATION

SCIENTIFIC OBSERVATIONS

LETHAL LIMIT VALUES

Product Data:

<u>Exposure Routes</u>	<u>Type</u>	<u>Prefix</u>	<u>Value</u>	<u>Unit</u>	<u>Species</u>	<u>Comment</u>
Ingestion	LD50	>	5000	mg/kg	Rat	Acute Oral Toxicity : Expected to be of low toxicity
Skin Contact	LD50	>	5000	mg/kg	Rabbit	Acute Dermal Toxicity : Expected to be of low toxicity
Inhalation						Acute Inhalation Toxicity : Not considered to be an inhalation hazard under normal conditions of use.

Additional Information:

Information given is based on data on the components and the toxicology of similar products.

CLASSIFICATION OF INGREDIENTS

Carcinogenicity:

Product contains mineral oils of types shown to be noncarcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)
This material contains a chemical known to the State of California to cause cancer.

Mutagenicity:

Not considered a mutagenic hazard.

Reproductive Effects:

Not expected to be a hazard.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

12 ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT

Comment:

Not classified as dangerous for the environment.

Mobility : Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Persistence/degradability : Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

Bioaccumulation : Contains components with the potential to bioaccumulate.

Other Adverse Effects : Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical

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12 ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT

Comment:

ozone creation potential or global warming potential.

ECOTOXICITY

Comment:

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity : Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

13 DISPOSAL CONSIDERATIONS

Waste Disposal Information:

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe disposal of this material. Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

Container Disposal : Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14 TRANSPORT INFORMATION

DOT Information:

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

Comment:

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations.

15 REGULATORY INFORMATION

Information about Limitation of Activities:

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

LABELLING

Hazard Codes:

NFPA Flammability	1
NFPA Health	0
NFPA Reactivity	0

NATIONAL REGULATIONS

SARA 311/312: No

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15 REGULATORY INFORMATION

NATIONAL REGULATIONS

SARA 313: No

Immediate Health: No

Delayed Health: No

Fire: No

Sudden Pressure Release: No

Reactive: No

Other Regulation:

TSCA: All components listed.

STATE/LOCAL REGULATIONS

Comment:

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16 OTHER INFORMATION