



Lubricants
United States

SAFETY DATA SHEET

Issue Date 02-Sep-2016

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Version 1

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

Product identifier

Product Name CHALLENGE PAO-EP 460

Other means of identification

Product code:

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Lubricant.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Sunoco Lubricants
420 Imperial Court
Bensalem, PA 19020 USA
P: 800.660.0761
F: 215.352.0141

CHEMTREC

Emergency telephone number

Emergency Telephone United States/Canada +1(800) 424-9300

2. HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	Category 1
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Label Elements

EMERGENCY OVERVIEW

Signal word

Warning

Hazard statements

May cause an allergic skin reaction



Appearance Oil

Physical state Liquid

Odor Slight Sulphurous

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves

Skin IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of in accordance with federal, state and local regulations

Hazards not otherwise classified (HNOC)

Other information

- May cause long lasting harmful effects to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Components	CAS-No	Weight %	Trade Secret
Olefin Sulfide	68937-96-2	< 1%	*

4. FIRST AID MEASURES

First aid measures

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin contact: Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.

Inhalation: In the case of inhalation of aerosol/mist consult a physician if necessary. Move to fresh air.

Ingestion: Do not induce vomiting without medical advice. Drink 1 or 2 glasses of water. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Contaminated surfaces will be extremely slippery. Wear personal protective equipment.

Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Contains mineral oil, vegetable oil, and/or synthetic oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg/m³, ACGIH STEL of 10 mg/m³.

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection: Breathing apparatus needed only when aerosol or mist is formed.

Hand protection: Gloves made of plastic or rubber

Eye protection: Safety glasses

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect
General Hygiene Considerations Avoid contact with skin, eyes and clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Oil **Odor** Slight Sulphurous **Color** Amber **Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>		
Melting point/freezing point	No information available		pH	Not applicable
Flash point	> 204 °C / > 400 °F	Cleveland Open Cup	Boiling point / boiling range	No information available
Flammability (solid, gas)	No information available		Evaporation rate	No information available
Upper flammability limit:	No information available		Flammability Limit in Air	
Vapor pressure	No information available		Lower flammability limit:	No information available
Specific Gravity	< 0.9		Vapor density	No information available
Solubility in other solvents	No information available		Water solubility	Insoluble in water
Autoignition temperature	No information available		Partition coefficient	No information available
Kinematic viscosity	approx. 490 cSt @ 40 ° C		Decomposition temperature	No information available
Explosive properties		No information available	Dynamic viscosity	No information available
Oxidizing properties		No information available		

Other information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Density No information available
Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity
 Not applicable

Chemical stability

Stability Stable under normal conditions
Possibility of Hazardous Reactions

Possibility of Hazardous Reactions None under normal processing.
Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid No special storage conditions required
Hazardous Decomposition Products

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors

Incompatible materials

Incompatible materials Oxidising agents

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information

Eye contact May cause slight irritation.

Skin contact Substance does not generally irritate and is only mildly irritating to the skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Inhalation Avoid breathing vapors or mists.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Components	Oral LD50	Dermal LD50	Inhalation LC50
Olefin Sulfide - 68937-96-2	= 6500 mg/kg (Rat)	-	-

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization by skin contact.

Mutagenic effects: Did not show mutagenic or teratogenic effects in animal experiments.

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.

STOT - Single Exposure None under normal use conditions.

STOT - Repeated Exposure None under normal use conditions.

Aspiration hazard Not applicable.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 11753 mg/kg
ATEmix (dermal) 13565 mg/kg
ATEmix (inhalation-dust/mist) 27246 mg/l
ATEmix (inhalation-vapor) 11216 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

May cause long lasting harmful effects to aquatic life

0.45% of the mixture consists of component(s) of unknown hazards to the aquatic environment

	Olefin Sulfide - 68937-96-2
Algae/aquatic plants	-

Fish	250 - 500: 96 h Pimephales promelas mg/L LC50 static 1000: 96 h Pimephales promelas mg/L LC50 semi-static
Crustacea	1000: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

The product is insoluble and floats on water.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not Regulated by any means of transportation

15. REGULATORY INFORMATION

International Inventories

TSCA: Listed in TSCA
DSL: All of the components in this product are listed in DSL
EINECS/ELINCS This product complies with EINECS/ELINCS
CHINA: This product complies with China IECSC.
KECL: This product complies with Korea KECL.
PICCS: This product complies with Philippines PICCS.
AICS: All the constituents of this material are listed on the Australian AICS

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations (RTK)

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

Nfpa:

Health: 1
 Flammability: 1
 Instability 0
 NFPA/HMIS * for Carc, Muta, Tera, Specific Organ *
HMIS health rating:
 Health: 2
 Flammability: 1
 Physical hazards 0
 Personal protection B

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 Revision Note
 Not applicable

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet