



High Performance Lubricants

SAFETY DATA SHEET

GEARSYN EP-220

SYNTHETIC EXTREME PRESSURE GEAR LUBRICANT H-2

Issue Date 18-April-2015

Revision Date 01-June-2025

Version 5

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

Product identifier

Product Name GEARSYN EP-220

Other means of identification

Product code: GEARSYNE EP-220

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

Petrochem, Inc.
333 North Randall Road
Saint Charles, IL 60174
Phone: (630) 513-6350
Fax: (630) 513-8324
info@petrochem1.com www.petrochem1.com

Emergency telephone number

Emergency Telephone CHEMTREC: 1-800-424-9300; INTERNATIONAL: (703) 527-3887

2. HAZARDS 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

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	0.5-0.9	*

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 Avoid contact with skin, eyes and clothing. 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>	<u>pH</u>	<u>Boiling point / boiling range</u>	<u>Evaporation rate</u>
Melting point/freezing point	No information available		Not applicable	No information available	
Flash point	> 204 °C / > 400 °F	Cleveland Open Cup			No information available

Flammability (solid, gas)	No information available	Flammability Limit in Air	
Upper flammability limit:	No information available	Lower flammability limit:	No information available
Vapor pressure	No information available	Vapor density	No information available
Specific Gravity	< 0.9	Water solubility	Insoluble in water
Solubility in other solvents	No information available	Partition coefficient	No information available
Autoignition temperature	No information available	Decomposition temperature	No information available
Kinematic viscosity	approx. 232 cSt @ 40 ° C	Dynamic viscosity	No information available
Explosive properties	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
<u>Possibility of Hazardous Reactions</u>	
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
<u>Hazardous Decomposition Products</u>	

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

Incompatible materials	Oxidising agents
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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)	7605 mg/kg
ATEmix (dermal)	8407 mg/kg
ATEmix (inhalation-dust/mist)	27014 mg/l
ATEmix (inhalation-vapor)	12235 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

May cause long lasting harmful effects to aquatic life

0.450% 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 INFORMATIONDOT

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 Material 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