

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· Trade name: **GEARAX EP 90**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

· **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations on industrial sites

· **Application of the substance / the preparation** : Lubricant

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Oryx Energies

12 rue Michel Servet

CH-1211 GENÈVE 12

SUISSE

Email: pauline.roussey@oryxenergies.com

· **1.4 Emergency telephone number:**

France (INRS 24h/24) - Tel : +33 (0)1 45 42 59 59

Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24) EU Tel: 112

Belgium - Brüssel: +32 070/245 245

UK : Call NHS 999 in a medical emergency. If you urgently need medical help or advice but it's not a life-threatening situation, call 111 (24/7). The NHS 111 number is currently only available in certain areas. If you're outside of these areas, you should call NHS Direct on 0845 4647

Swiss Toxicological Information Centre (Zürich) : +41 44 251 51 51 / www.toxi.ch.

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008 :**



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the C.L.P. regulation.

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labelling:**

Polysulfides, di-tert-Bu

Reaction products of

bis(4-methylpentan-2-yl)dithiophosphoric acid

with phosphorus oxide, propylene oxide and

amines, C12-14-alkyl (branched)

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: **GEARAX EP 90**

(Contd. of page 1)

· Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

The mixture shall not contain substances listed in accordance with Article 59(1) R.E.A.C.H as having endocrine disrupting properties, or be recognised as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in a concentration equal to or greater than 0.1%.

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Preparation: composed of the substances listed below.

· Dangerous components:

CAS: 68955-41-9	Polysulfides, di-tert-Bu	0-≤2.5%
-----------------	--------------------------	---------

EINECS: 273-103-3	⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
-------------------	--	--

Reg.nr.: 01-2119540515-43		
---------------------------	--	--

EC number: 931-384-6	Reaction products of	0-≤1%
----------------------	----------------------	-------

Reg.nr.: 01-2119493620-38	bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	
---------------------------	--	--

	⚠ Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	
--	---	--

· **SVHC** -

· **Additional information:** For the wording of the listed risk phrases, refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient in a stable laying down side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Do not induce vomiting; call for medical help immediately.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: GEARAX EP 90

(Contd. of page 2)

- **4.2 Most important symptoms and effects, both acute and delayed :**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed :**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture :**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures :**
Avoid contact with the eyes
- **For non-emergency personnel** No other relevant information available.
- **For emergency responders** No other relevant information available.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow the product to enter sewers/ surface water or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections :**
See Section 7 for information on safe handling.
See Section 8 for information on personal protective equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling :**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s) :** No further relevant information available.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: **GEARAX EP 90**

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any significant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:**
The most current valid lists have been used as a basis for the production of this document.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Keep away from food, beverages and petfood.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Hand protection**



Protective gloves

- **Gloves material :** Butyl rubber, BR
- **Eye/face protection**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Liquid
- **Form:** Liquid
- **Colour:** According to product specification
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** -9 °C
- **Boiling point or initial boiling point and boiling range** Undetermined.
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** 210 °C
- **Auto-ignition temperature:** Not applicable.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: **GEARAX EP 90**

(Contd. of page 4)

· Decomposition temperature:	Not determined.
· pH	Mixture is non-polar/aprotic.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Kinematic at 40 °C:	150 cSt
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 15 °C:	0.908 g/cm ³
· Relative density :	Not determined.
· Vapour density :	Not determined.
· 9.2 Other information :	
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not self igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· COV (CH) :	0.00 %
· Change in condition	
· Evaporation rate :	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Not classified as hazardous
· Flammable gases	Not classified as hazardous
· Aerosols	Not classified as hazardous
· Oxidising gases	Not classified as hazardous
· Gases under pressure	Not classified as hazardous
· Flammable liquids	Not classified as hazardous
· Flammable solids	Not classified as hazardous
· Self-reactive substances and mixtures	Not classified as hazardous
· Pyrophoric liquids	Not classified as hazardous
· Pyrophoric solids	Not classified as hazardous
· Self-heating substances and mixtures	Not classified as hazardous
· Substances and mixtures, which emit flammable gases in contact with water	Not classified as hazardous
· Oxidising liquids	Not classified as hazardous
· Oxidising solids	Not classified as hazardous
· Organic peroxides	Not classified as hazardous
· Corrosive to metals	Not classified as hazardous
· Desensitised explosives	Not classified as hazardous

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: **GEARAX EP 90**

(Contd. of page 5)

- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions :** Reacts with oxidising agents.
- **10.4 Conditions to avoid :** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eyes:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitization** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability :** No further relevant information available.
- **12.3 Bioaccumulative potential :** No further relevant information available.
- **12.4 Mobility in soil :** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects :** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: **GEARAX EP 90**

(Contd. of page 6)

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation :**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **DOT, ADR, IMDG, IATA** none
- **14.2 UN proper shipping name**
- **ADR, IMDG, IATA** none
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** none
- **14.4 Packing group**
- **ADR, IMDG, IATA** none
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
- **UN "Model Regulation":** none

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the ingredients is listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31 & 2020/878/EC

Printing date 26.09.2023

Version number 2 (replaces version 1)

Revision: 26.09.2023

Trade name: GEARAX EP 90

(Contd. of page 7)

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Classification in accordance with Delegated Regulation (EU) 2022/692 of 16 February 2022 adapting to technical and scientific progress GB CLP for the 18th time and amending table 3 of Annex VI part 3 of Regulation (EC) 1272/2008.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008**

Skin sensitisation The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Version number of previous version: 1**

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3