

Product: LUBRAX GL 5 LS 90

SDS ID: 1010366

Revision date: 24/05/2025

## SECTION 1: Identification

### 1.1. GHS Product identifier

|               |                       |
|---------------|-----------------------|
| Product form  | : Mixture             |
| Product name  | : LUBRAX GL 5 LS 90   |
| Product code  | : 1010366             |
| Product group | : Produtos comerciais |

### 1.2. Other means of identification

No additional information available

### 1.3. Recommended use of the chemical and restrictions on use

|                 |                  |
|-----------------|------------------|
| Recommended use | : Lubricant oil. |
|-----------------|------------------|

### 1.4. Supplier's details

|                 |                                                                      |
|-----------------|----------------------------------------------------------------------|
| Name of company | : Vibra Energia S.A.                                                 |
| Address         | : Rua Correia Vasques, 250<br>Rio de Janeiro<br>Brasil<br>20.211-140 |

|     |                                                                                |
|-----|--------------------------------------------------------------------------------|
| SAC | : 4090 1337 ou 0800 770 1337 (capitals, metropolitan regions or other regions) |
|-----|--------------------------------------------------------------------------------|

|                            |                  |
|----------------------------|------------------|
| Emergency telephone number | : 0800 024 44 33 |
|----------------------------|------------------|

### 1.5. Emergency phone number

|                  |                                                                                                                        |
|------------------|------------------------------------------------------------------------------------------------------------------------|
| Emergency number | : 0800 024 44 33 CAE (Emergency Support Center), for leaks, spills and other accidents that require emergency support. |
|------------------|------------------------------------------------------------------------------------------------------------------------|

## SECTION 2: Hazard identification

### 2.1. Classification of the substance or mixture

Classification according to GHS BR (ABNT NBR 14725: 2023)

Serious eye damage/eye irritation, Category 2

Skin sensitisation, Category 1

Hazardous to the aquatic environment - Acute Hazard, Category 2

Hazardous to the aquatic environment - Chronic Hazard, Category 3

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## 2.2. GHS Label elements, including precautionary statements

### GHS BR labelling

Hazard pictograms (GHS BR)



Signal word (GHS BR)

: Warning

Hazard statements (GHS BR)

: H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H401 - Toxic to aquatic life  
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS BR)

Prevention

: P261 - Avoid breathing dust, fume, gas, mist, vapours or spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.

Response

: 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.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.  
P337+P313 - If eye irritation persists: Get medical advice or attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

Disposal

## 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

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## 3.2. Mixtures

| Name                                                                                                                                          | GHS Product identifier | %       | Classification according to GHS BR (ABNT NBR 14725: 2023)                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | CAS-No.: Confidencial  | 1 - 2   | Flam. Liq. 4, H227<br>Acute Tox. 4 (Oral), H302<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Acute 2, H401<br>Aquatic Chronic 2, H411                                     |
| Alkylamine salt of alkyl phosphoric acid                                                                                                      | CAS-No.: Confidencial  | 0,5 - 2 | Aquatic Acute 3, H402<br>Aquatic Chronic 3, H412                                                                                                                                    |
| Alkenyl amine                                                                                                                                 | CAS-No.: Confidencial  | 0,2 - 1 | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>STOT RE 2, H373<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

### Comments

: The mineral oils present in the product are highly refined and contain <3% DMSO extract (IP 346).  
The mineral oils present in the product are absent of Benzene, Toluene and Xylene.

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

|                                       |                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures general            | : People with over sensibility problems are not allowed to work or be exposed to the product.                                                                                          |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.                                                                                                                       |
| First-aid measures after skin contact | : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact  | : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.                                                                                        |
| First-aid measures after ingestion    | : Do NOT induce vomiting. Rinse mouth out with water.                                                                                                                                  |

### 4.2. Most important symptoms and effects, acute and delayed

|                  |                                        |
|------------------|----------------------------------------|
| Symptoms/effects | : May cause an allergic skin reaction. |
|------------------|----------------------------------------|

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Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : Cracking of the skin. Prolonged or repeated contact may cause skin to become dry.

Symptoms/effects after eye contact : None under normal conditions.

Symptoms/effects after ingestion : None under normal conditions.

**4.3. Indication of any immediate medical attention and special treatment needed, if necessary**

Notes to physician : Treat symptomatically

**SECTION 5: Fire-fighting measures****5.1. Suitable extinguishing media**

Suitable extinguishing media : Water spray. dry chemical powder, foam for use in hydrocarbons, carbon dioxide (CO<sub>2</sub>).

Unsuitable extinguishing media : Do not use a heavy water stream.

**5.2. Specific hazards arising from the chemical**

Fire hazard : In case of fire and/or explosion do not breathe fumes.

Explosion hazard : No direct explosion hazard.

**5.3. Special protective actions for fire-fighters**

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Wear recommended personal protective equipment.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

General measures : Avoid contact with skin and eyes. May be harmful to aquatic organisms, to flora, to soil organisms. Clean up any spills as soon as possible, using an absorbent material to collect it. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

**6.1.1. For non-emergency personnel**

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate area. Only qualified personnel equipped with suitable protective equipment may intervene. Notify fire brigade and environmental authorities.

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## 6.1.2. For emergency responders

- |                      |                                                                                                                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | : Self-contained breathing apparatus. Total impervious protective suits, gloves, and boots must be worn to prevent any contact with the product. Equip cleanup crew with proper protection. |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so.                                                                                                                               |

## 6.2. Environmental precautions

Harmful to aquatic life with long lasting effects. Do not allow product to spread into the environment. Do not allow to enter drains or water courses. Toxic to aquatic life. Notify authorities if product enters sewers or public waters.

## 6.3. Methods and materials for containment and cleaning up

- |                         |                                                                                                                                                                                       |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For containment         | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Absorb spilled material with sand or earth. Take up liquid spill into absorbent material.                                                                                           |

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

- |                                   |                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use.                                                                                                                                                                                                                        |
| Precautions for safe handling     | : Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Ensure good ventilation of the work station. Wear personal protective equipment. Keep only in original container. Do not handle until all safety precautions have been read and understood. |
| Hygiene measures                  | : Take off immediately all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product.                                                                                                                                                                                    |

## 7.2. Conditions for safe storage, including any incompatibilities

- |                     |                                                                                  |
|---------------------|----------------------------------------------------------------------------------|
| Technical measures  | : Store locked up. Store in tightly closed, leak-proof containers.               |
| Storage conditions  | : Keep cool. Protect from sunlight. Store in a well-ventilated place. Keep cool. |
| Packaging materials | : Store always product in container of same material as original container.      |

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

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Exposure limit for mists/aerosols that may form while using this product:

|                     |                                                                   |
|---------------------|-------------------------------------------------------------------|
| Name                | Mineral oil, excluding working fluids - poorly and mildly refined |
| TWA - (ACGIH, 2024) | 5 ppm                                                             |

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

## 8.3. Individual protection measures

### Personal protective equipment:

Wear recommended personal protective equipment.

|                         |
|-------------------------|
| <b>Hand protection:</b> |
| Nitrile rubber gloves   |

|                                                   |
|---------------------------------------------------|
| <b>Eye protection:</b>                            |
| Wear security glasses which protect from splashes |

|                                                                                             |
|---------------------------------------------------------------------------------------------|
| <b>Skin and body protection:</b>                                                            |
| Chemical resistant safety shoes. Long sleeved protective clothing. Chemical resistant apron |

|                                                              |
|--------------------------------------------------------------|
| <b>Respiratory protection:</b>                               |
| No respiratory protection needed under normal use conditions |

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

|                 |                            |
|-----------------|----------------------------|
| Physical state  | : Liquid                   |
| Appearance      | : Clear and Bright Liquid. |
| Colour          | : light brown              |
| Odour           | : Typical of lubricant oil |
| Odour threshold | : Not available            |

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|                                                    |                  |
|----------------------------------------------------|------------------|
| pH                                                 | : Not available  |
| Melting point                                      | : Not available  |
| Freezing point                                     | : Not available  |
| Boiling point                                      | : Not available  |
| Flash point                                        | : 224 °C (COC)   |
| Relative evaporation rate<br>(butylacetate=1)      | : Not available  |
| Flammability                                       | : Not available  |
| Explosive limits                                   | : Not available  |
| Vapour pressure                                    | : Not available  |
| Relative vapour density at 20°C                    | : Not available  |
| Relative density                                   | : 0,9 (20/4°C)   |
| Density                                            | : Not available  |
| Solubility                                         | : Not available  |
| Partition coefficient n-octanol/water<br>(Log Kow) | : Not available  |
| Auto-ignition temperature                          | : Not available  |
| Decomposition temperature                          | : Not available  |
| Kinematic Viscosity (40°C)                         | : 189 cSt        |
| Particle size                                      | : Not applicable |
| Particle size distribution                         | : Not applicable |
| Particle shape                                     | : Not applicable |
| Particle aspect ratio                              | : Not applicable |
| Particle specific surface area                     | : Not applicable |

**9.2. Data relevant with regard to physical hazard classes**

No additional information available

**9.3. Further safety characteristics**

No additional information available

**SECTION 10: Stability and reactivity**

|                                    |                                                                                                                                      |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Chemical stability                 | : Stable under normal conditions of use.                                                                                             |
| Conditions to avoid                | : Extremely high or low temperatures. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| Hazardous decomposition products   | : No hazardous decomposition products known at room temperature.                                                                     |
| Incompatible materials             | : Consult supplier(s) of these materials for specific recommendations.                                                               |
| Possibility of hazardous reactions | : None under normal use.                                                                                                             |
| Reactivity                         | : The product is non-reactive under normal conditions of use, storage and transport.                                                 |
| Handling temperature               | : No additional information available                                                                                                |

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not available  
 Acute toxicity (dermal) : Not available  
 Acute toxicity (inhalation) : Not available

**Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) (Confidential)**

|               |                      |
|---------------|----------------------|
| ATE BR (oral) | 500 mg/kg bodyweight |
|---------------|----------------------|

**Alkenyl amine (Confidential)**

|               |                      |
|---------------|----------------------|
| ATE BR (oral) | 500 mg/kg bodyweight |
|---------------|----------------------|

Skin corrosion/irritation : Not available  
 Serious eye damage/irritation : Causes serious eye irritation.  
 Respiratory or skin sensitisation : May cause an allergic skin reaction.  
 Germ cell mutagenicity : Not available  
 Carcinogenicity : Not available  
 Reproductive toxicity : Not available  
 STOT-single exposure : Not available

**Alkenyl amine (Confidential)**

|                      |                                   |
|----------------------|-----------------------------------|
| STOT-single exposure | May cause respiratory irritation. |
|----------------------|-----------------------------------|

STOT-repeated exposure : Not available

**Alkenyl amine (Confidential)**

|                        |                                                                    |
|------------------------|--------------------------------------------------------------------|
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |
|------------------------|--------------------------------------------------------------------|

Aspiration hazard : Not available  
 Other information : This mixture does not contain carcinogenic ingredients. The mineral oils present in the product are highly refined and contain <3% DMSO extract (IP 346).

**LUBRAX GL 5 LS 90**

|                             |                        |
|-----------------------------|------------------------|
| Kinematic Viscosity (40 °C) | 189 mm <sup>2</sup> /s |
|-----------------------------|------------------------|



**Product: LUBRAX GL 5 LS 90****SDS ID: 1010366****Revision date: 24/05/2025****11.2. Most important symptoms and effects, both acute and delayed**

|                                     |                                                                                                                                         |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Symptoms/effects                    | : May cause an allergic skin reaction.                                                                                                  |
| Symptoms/effects after inhalation   | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : Cracking of the skin. Prolonged or repeated contact may cause skin to become dry.                                                     |
| Symptoms/effects after eye contact  | : None under normal conditions.                                                                                                         |
| Symptoms/effects after ingestion    | : None under normal conditions.                                                                                                         |

**SECTION 12: Ecological information****12.1. Toxicity**

|                                                           |                                                      |
|-----------------------------------------------------------|------------------------------------------------------|
| Hazardous to the aquatic environment, short-term (acute)  | : Toxic to aquatic life.                             |
| Hazardous to the aquatic environment, long-term (chronic) | : Harmful to aquatic life with long lasting effects. |

**Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) (Confidencial)**

|                                    |             |
|------------------------------------|-------------|
| LC50 - Fish [1]                    | = 8,5 mg/l  |
| LC50 - Other aquatic organisms [1] | = 24 mg/l   |
| EC50 - Crustacea [1]               | = 91,4 mg/l |
| EC50 96h - Algae [1]               | = 6,4 mg/l  |
| NOEC (chronic)                     | = 1,7 mg/l  |
| NOEC chronic fish                  | = 3,2 mg/l  |
| NOEC chronic crustacea             | = 0,12 mg/l |
| NOEC chronic algae                 | = 1,7 mg/l  |

**Alkenyl amine (Confidencial)**

|                        |              |
|------------------------|--------------|
| LC50 - Fish [1]        | = 0,9 mg/l   |
| EC50 - Crustacea [1]   | = 0,011 mg/l |
| EC50 72h - Algae [1]   | > 0,1 mg/l   |
| NOEC chronic crustacea | = 0,013 mg/l |

**12.2. Persistence and degradability****LUBRAX GL 5 LS 90**

|                               |                    |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

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No additional information available

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

Hazardous to the ozone layer : Not available

**SECTION 13: Disposal considerations**

|                                            |                                                                                    |
|--------------------------------------------|------------------------------------------------------------------------------------|
| Regional waste regulation                  | : Law No. 12.305 on the National Policy on Solid Waste Management, 02 August 2010. |
| Waste treatment methods                    | : Must follow special treatment according to local regulation.                     |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                         |
| Product/Packaging disposal recommendations | : Disposal must be done according to official regulations.                         |
| Additional information                     | : Do not re-use empty containers.                                                  |

**SECTION 14: Transport information**

In accordance with IMDG / IATA / ANTT

**14.1 National and international Regulations****Overland transport**

|                               |                  |
|-------------------------------|------------------|
| Proper Shipping Name (ANTT)   | : Not applicable |
| Dangerous for the environment | : No             |

**Transport by sea**

|                             |                  |
|-----------------------------|------------------|
| UN-No. (IMDG)               | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Class (IMDG)                | : Not applicable |
| Subsidiary hazard (IMDG)    | : Not applicable |
| Packing group (IMDG)        | : Not applicable |
| EmS-No. (Fire)              | : Not applicable |
| EmS-No. (Spillage)          | : Not applicable |
| Special provisions (IMDG)   | : Not applicable |

**Air transport**

|                             |                  |
|-----------------------------|------------------|
| UN-No. (IATA)               | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |
| Class (IATA)                | : Not applicable |
| Subsidiary hazards (IATA)   | : Not applicable |
| Packing group (IATA)        | : Not applicable |

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Special provisions (IATA) : Not applicable

## 14.2 Other informations

No additional information available

## SECTION 15: Regulatory information

### 15.1. National regulations

Brazil Local Regulations

: Norma ABNT NBR 14725.

Federal Decree no. 10.088, of 5 November 2019 - Promulgates Convention no. 170 of the WLO, relating to Safety in the Use of Chemicals in the Workplace, ratified by the Federative Republic of Brazil.

Ministerial Order no. 2.770, of 5 September 2022 - Approves the new wording of Regulatory Standard No. 26

Federal Decree no. 96.044, of 18 May 1988 - Approves Regulations for Road Transportation of Hazardous Materials

Resolution no. 5998, of 03 November 2022, updates the regulation for road transport of dangerous goods, approves its Complementary Instructions, and other measures.

## SECTION 16: Other information

No additional information available

Safety Data Sheet (SDS), Brazil

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.