

**Product: LUBRAX FLUIDO PARA RADIADORES HD-2  
CONCENTRADO**

SDS ID: 1015642

Revision date: 24/05/2025

## SECTION 1: Identification

### 1.1. GHS Product identifier

Product form	: Mixture
Product name	: LUBRAX FLUIDO PARA RADIADORES HD-2 CONCENTRADO
Product code	: 1015642
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	: Heavy-duty diesel engine cooling system
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### 1.4. Supplier's details

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

SAC	: 4090 1337 ou 0800 770 1337 (capitals, metropolitan regions or other regions)
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Emergency telephone number	: 0800 024 44 33
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### 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.
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## SECTION 2: Hazard identification

### 2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4

Reproductive toxicity, Category 1B

Specific target organ toxicity – Repeated exposure, Category 1

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**2.2. GHS Label elements, including precautionary statements****GHS BR labelling**

Hazard pictograms (GHS BR)



Signal word (GHS BR)

: Danger

Hazard statements (GHS BR)

: H302 - Harmful if swallowed

H360 - May damage fertility or the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS BR)

Prevention

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust, fume, gas, mist, vapours or spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.

Response

: P301+P312 - IF SWALLOWED: Call a POISON CENTER or a doctor if you feel unwell.

P308+P313 - IF exposed or concerned: Get medical advice or attention.

P314 - Get medical advice or attention as appropriate.

P330 - Rinse mouth.

Storage

: P405 - Store locked up.

Disposal

: P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

**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)
Ethane-1,2-diol	CAS-No.: 107-21-1	≥ 80	Acute Tox. 4 (Oral), H302 STOT RE 2, H373 Asp. Tox. 2, H305
2,2'-oxydiethanol	CAS-No.: 111-46-6	1 - 2	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
4-tert-butylbenzoic acid	CAS-No.: 98-73-7	< 2	Acute Tox. 4 (Oral), H302 Repr. 1B, H360 STOT RE 1, H372
Denatonium benzoate	CAS-No.: 3734-33-6	< 1	Acute Tox. 4 (Oral), H302

## SECTION 4: First-aid measures

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

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
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.
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	: If swallowed, seek medical advice immediately and show this container or label.

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

Symptoms/effects	: Causes damage to organs through prolonged or repeated exposure. Swallowing a small quantity of this material presents some health hazard.
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	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed. Ingestion may cause nausea and vomiting.
Chronic symptoms	: May damage fertility. May damage the unborn child.

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

Notes to physician	: Treat symptomatically
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## 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 : Use self-contained breathing apparatus and chemically protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : 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.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

### 6.2. Environmental precautions

Do not allow to enter drains or water courses. Notify authorities if product enters sewers or public waters.

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## 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. Clean contaminated surfaces with an excess of water. Absorb spillage to prevent material damage.

## 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 : Obtain special instructions before use. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Keep only in original container. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Always wash hands after handling the product. Remove contaminated clothes. Do not eat, drink or smoke when using this product.

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

- Technical measures : Store locked up.
- Storage conditions : Keep cool. Protect from sunlight.
- Packaging materials : Store always product in container of same material as original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ethane-1,2-diol (107-21-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Etileno Glicol - CAS# 107-21-1
ACGIH OEL TWA	100 mg/m <sup>3</sup>
	25 ppm (V - Vapor fraction)
ACGIH OEL STEL	10 mg/m <sup>3</sup>
	50 ppm

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<b>Ethane-1,2-diol (107-21-1)</b>	
Remark (ACGIH)	URT irr; A4
Regulatory reference	(somente aerossol)

## 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>
Protective gloves

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

<b>Skin and body protection:</b>
Wear suitable protective clothing

<b>Respiratory protection:</b>
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state : Liquid  
Appearance : Liquid.  
Colour : red

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Odour	: Light
Odour threshold	: Not available
pH	: 8,6
Melting point	: Not available
Freezing point	: -15 °C
Boiling point	: > 170 °C
Flash point	: 119 °C
Relative evaporation rate (butylacetate=1)	: Not available
Flammability	: Not available
Explosive limits	: 3,2 - 15,3
Vapour pressure	: < 0,1 mm Hg
Relative vapour density at 20 °C	: Not available
Relative density	: 1,12 (20/4 °C)
Density	: 1,12 kg/l
Solubility	: Water:
Partition coefficient n-octanol/water (Log Kow)	: Not available
Auto-ignition temperature	: 400 °C
Decomposition temperature	: Not available
Kinematic Viscosity (40 °C)	: Not available
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**

VOC content : 0 %

**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	: Strong acids. Strong bases. Oxidizing agent.
Possibility of hazardous reactions	: None under normal use.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

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Handling temperature : No additional information available

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not available

Acute toxicity (inhalation) : Not available

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ATE BR (oral)	515,464 mg/kg bodyweight
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**Ethane-1,2-diol (107-21-1)**

LD50 oral rat	4000 mg/kg
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LD50 dermal rat	9530 µl/kg
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ATE BR (oral)	500 mg/kg bodyweight
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ATE BR (dermal)	10578,3 mg/kg bodyweight
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**2,2'-oxydiethanol (111-46-6)**

LD50 dermal rabbit	11890 mg/kg
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ATE BR (oral)	500 mg/kg bodyweight
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ATE BR (dermal)	11890 mg/kg bodyweight
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**Denatonium benzoate (3734-33-6)**

LD50 oral rat	584 mg/kg
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ATE BR (oral)	584 mg/kg bodyweight
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**4-tert-butylbenzoic acid (98-73-7)**

ATE BR (oral)	500 mg/kg bodyweight
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Skin corrosion/irritation : Not available  
pH: 8,6Serious eye damage/irritation : Not available  
pH: 8,6

Respiratory or skin sensitisation : Not available

Germ cell mutagenicity : Not available



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Carcinogenicity : Not available

Ethane-1,2-diol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)

Reproductive toxicity : May damage fertility or the unborn child.

STOT-single exposure : Not available

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Ethane-1,2-diol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2,2'-oxydiethanol (111-46-6)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

4-tert-butylbenzoic acid (98-73-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not available

Ethane-1,2-diol (107-21-1)	
Kinematic Viscosity (40 °C)	14,505 mm <sup>2</sup> /s

## 11.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes damage to organs through prolonged or repeated exposure. Swallowing a small quantity of this material presents some health hazard.
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	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Harmful if swallowed. Ingestion may cause nausea and vomiting.
Chronic symptoms	: May damage fertility. May damage the unborn child.

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## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, : Not available  
short-term (acute)

Hazardous to the aquatic environment, : Not available  
long-term (chronic)

Ethane-1,2-diol (107-21-1)	
LC50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other:greenn algae
EC50 96h - Algae [2]	6500 - 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

2,2'-oxydiethanol (111-46-6)	
LC50 - Fish [1]	> 500000 ppm

### 12.2. Persistence and degradability

LUBRAX FLUIDO PARA RADIADORES HD-2 CONCENTRADO	
Persistence and degradability	Rapidly degradable

### 12.3. Bioaccumulative potential

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

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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

UN-No. (ANTT)	: 3082
Proper Shipping Name (ANTT)	: Not applicable
Packing group (ANTT)	: II
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
Special provisions (IATA)	: Not applicable

#### 14.2 Other informations

No additional information available

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## 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 November 3, 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.