

SAFETY DATA SHEET

Product: AGRICULTURAL MINERAL OIL

N° SDS: Pb0099_e

Revision: 1.0e

Date: 01/23/2025

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1 - IDENTIFICATION

GHS Product identifier: AGRICULTURAL MINERAL OIL

Other means of identification: OMA; Pb0099_e

Recommended use of the chemical: Used in agricultural adjuvants.

Specific restrictions on use: There are not known restrictions on use.

Supplier's details: Petrobras Biocombustível S. A.
Address: Rua do Passeio, 38, Setor 4, 2º andar, Centro, CEP: 20021-290 - RJ – Brasil.
Phone number: 0800-728-9001

Emergency phone number: 0800 728 9001 Opção 02

2 - HAZARD IDENTIFICATION

Classification of the substance or mixture: Acute Toxicity - Inhalation - Category 4;
Aspiration Hazard - Category 1.

Classification system adopted: Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.

GHS label elements, including precautionary statements

Pictograms:



Signal word: DANGER

Hazard statement(s): H304 May be fatal if swallowed and enters airways.
H332 Harmful if inhaled.

Precautionary statement(s): **PREVENTION:**
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.

RESPONSE TO EMERGENCY:

P301 + P316 IF SWALLOWED: Get emergency medical help immediately.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P317 Get medical help.
P331 Do NOT induce vomiting.

STORAGE:

P405 Store locked up.

DISPOSITION:

P501 Dispose of contents and container in accordance with local regulations.

Other hazards which do not result in classification: The product has no other hazards.

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3 - COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE

Common chemical name:	Lubricating oils.
Common name(s), synonym(s) of the substance:	Base Oil; Basic Lubricating Oil.
CAS:	74869-22-0
Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance:	Does not contain components that contribute to the hazard.

4 - FIRST-AID MEASURES

Description of necessary first-aid measures

Inhalation:	Remove victim to fresh air and keep in a position that does not obstruct breathing. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.
Skin:	Wash exposed skin with sufficient amount of water to remove the product. Remove and isolate contaminated clothing and shoes. In case of skin irritation: Consult a doctor. Bring this document.
Eye:	Rinse carefully with water for several minutes. If wearing contact lenses, remove them if it is easy and keep rinsing. If eye irritation persists: consult a doctor. Bring this document.
Ingestion:	Wash the victim's mouth with plenty of water. Never give anything by mouth to an unconscious person. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.
Most important symptoms/effects, acute and delayed:	May be fatal if swallowed and enters airways. Harmful if inhaled.
Indication of immediate medical attention and special treatment needed, if necessary:	Avoid contact with the product when helping the victim. If necessary, symptomatic treatment should include, above all, supportive measures such as correction of hydro electrolytic and metabolic disorders and respiratory assistance. In case of skin contact, do not rub the affected area.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:	Suitable: carbon dioxide (CO ₂), foam, water mist and powder. Unsuitable: water jet directly.
Specific hazards arising from the chemical:	Combustion of the material or its packaging can form irritating and toxic gases such as carbon monoxide and dioxide. Vapors can be denser than air and tend to accumulate in low-lying or confined areas such as storm drains and basements. Containers may explode if heated.
Special protective actions for fire-fighters:	Wear positive pressure self-contained breathing apparatus (SCBA) and full protective clothing. Containers and tanks involved in the fire must be cooled with water mist.

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6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Isolate the leakage from sources of ignition. Keep unauthorized persons away from the area. Stop the leakage if it can be done without risk. Do not smoke. Do not touch damaged containers or spilled product without proper clothing. Avoid exposure to the product. Stay in a safe place, with the wind at your back. Use personal protective equipment as described in section 8.
For emergency responders:	Wear complete PPE with safety glasses, safety gloves, suitable protective clothing and closed shoes. In case of leakage, where exposure is high, it is recommended to use a suitable respiratory protection mask.
Environmental precautions:	Avoid that the spilled product reaches waterways or sewage system.
Methods and materials for containment and cleaning up:	Use water mist or vapor suppressing foam to reduce the dispersion of vapors. Use natural or spill containment barriers. Collect spilled products and place them in appropriate containers. Adsorb the remaining product with dry sand, earth, vermiculite, or any inert product. Place the adsorbed product in proper containers and remove it to a safe place. For final disposal, proceed according to Section 13 of this document.

7 - HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling:	Handle in a well ventilated area or with general system of ventilation/local exhaust. Avoid vapors and mists formation. Avoid exposure to the product, since the effects may not be felt immediately. Use personal protective equipment as described in section 8. Avoid contact with incompatible materials.
General hygiene:	Wash hands and face thoroughly after handling and before eating, drinking, smoking, or using the toilet. Contaminated clothing should be changed and washed before reuse. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Technical measures for prevention of fire and explosion:	It is not expected that the product presents a fire or explosion hazard.
Conditions for safe storage, including any incompatibilities:	Store in a dry, well-ventilated place away from sunlight. Keep the container closed. It is not necessary addition of stabilizers and antioxidants to ensure the durability. Keep away from incompatible materials.
Packaging compatibilities:	Similar to the original packaging.
Inadequate packaging materials:	There are not known unsuitable material.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit:	No occupational exposure limits are established.
Biological limit:	No biological indicators of exposure are established.
Other limits and values:	No other limits and values are established.
Appropriate engineering	A risk assessment is recommended to define the engineering control measures necessary to

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controls: eliminate or minimize the risk. These measures help to reduce exposure to the product.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection: Avoid wearing contact lenses while handling this product. Safety glasses or splash face shield.

Skin protection: Waterproof apron and safety boots. PVC protective gloves.

Respiratory protection: The use of a respirator with a filter for organic vapors is recommended for average exposures above half the TLV-TWA. In cases where exposure exceeds 3 times the TLV-TWA value, use a self-contained, air-supplied, full-facepiece respirator (SCBA) operated in positive pressure mode.

Thermal hazards: It does not present thermal hazards.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Liquid, clear and transparent.

Color: Yellowish.

Odour: Characteristic.

Melting point/freezing point: Not available.

Boiling point or initial boiling point and boiling range: 300 to 470 °C (572 to 878 °F).

Flammability: Not flammable.

Lower and upper explosion limit/flammability limit: Not available.

Flash point: ≥ 170 °C (338 °F) - Closed cup.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

pH: Not available.

Kinematic viscosity: 12.7 to 13.8 mm²/s at 40 °C (104 °F).

Solubility(ies): Immiscible in water. Miscible in organic solvents.

Partition coefficient n-octanol/water (log value): $\log K_{ow}$: 3.9 to 6.Vapour pressure: < 666 Pa at 25 °C (77 °F).

Relative vapour density: Not available.

Density and/or relative density: Relative density: 0.846 (water at 4 °C(39,2 °F) = 1) at 20 °C (68 °F).

Particle characteristics: Not applicable.

Other information: Pour point: ≤ -6 °C (≤ 21.2 °F).
Polyaromatic content $< 3.0\%$ (IP 346).

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10 - STABILITY AND REACTIVITY

Reactivity:	Reactivity is not to be expected under normal conditions of temperature and pressure.
Chemical stability:	Stable under normal temperature and pressure conditions.
Possibility of hazardous reactions:	There are not known hazardous reactions with the material.
Conditions to avoid:	High temperatures. Contact with incompatible materials.
Incompatible material:	Strong oxidizing agents such as peroxides, chlorates and nitrates.
Hazardous decomposition products:	No dangerous decomposition products are known.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity:	Product not classified as acute toxic by oral and dermal. Harmful if inhaled. LC ₅₀ Dusts and mists (rats, 4h): 2.18 mg/L. LD ₅₀ Oral (rats): > 5000 mg/kg. LD ₅₀ Dermal (rats): > 5000 mg/kg.
Skin corrosion/irritation:	It is not expected to cause skin irritation.
Serious eye damage/irritation:	It is not expected to cause eye irritation.
Respiratory or skin sensitization:	It is not expected to present respiratory or skin sensitization.
Germ cell mutagenicity:	It is not expected to show mutagenicity in germ cells.
Carcinogenicity:	It is not expected to be carcinogenic.
Reproductive toxicity:	It is not expected to be reproductively toxic.
STOT - Single exposure:	It is not expected to exhibit specific target organ toxicity by single exposure.
STOT - Repeated exposure:	It is not expected to exhibit specific target organ toxicity on repeated exposure.
Aspiration hazard:	May be fatal if swallowed and enters airways.

12 - ECOLOGICAL INFORMATION

Ecotoxicity:	It is not expected to be ecotoxic. LC ₅₀ (<i>Pimephales promelas</i> , 96 h): > 100 mg/L; EC ₅₀ (<i>Daphnia magna</i> , 48 h): > 100 mg/L; NOEC (<i>Oncorhynchus mykiss</i> , 14 d): > 1 mg/L; NOEC (<i>Daphnia magna</i> , 21 d): > 1 mg/L; NOEC (<i>Raphidocelis subcapitata</i> , 72 h): > 1 mg/L.
Persistence and degradability:	It has persistence and is not considered rapidly degradable. Degradation rate: 31% in 28 days.
Bioaccumulative potential:	Presents high bioaccumulative potential in aquatic organisms. Log <i>K</i> _{ow} : 3.9 to 6.

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Mobility in soil: Not determined.

Other adverse effects: The release of large amounts can cause undesirable environmental effects, such as the decrease in oxygen availability in aquatic environments due to the formation of an oily layer on the surface, coating and consequent suffocation of animals.

13 - DISPOSAL CONSIDERATIONS**Disposal methods**

It must be disposed of as hazardous waste in accordance with local legislation. Treatment and disposal must be evaluated specifically for each product. Keep product residues in their original packaging and properly closed. Disposal must be carried out as established for the product.

14 - TRANSPORT INFORMATION

Road: UN - United Nations: Model Regulations:
• Recommendations on the Transport of Dangerous Goods.

UN number: Not classified as hazardous for the road transportation.

Environmental hazards: The product is not considered dangerous for the environment for land transport.

Railway regulations: COTIF - Convention concerning International Carriage by Rail:
• Appendix C: RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.

UN number: Not classified as dangerous for rail transport.

Environmental hazards: The product is not considered dangerous for the environment in rail transport.

Sea: IMO - International Maritime Organization:
• IMDG Code - International Maritime Dangerous Goods Code.

UN number: Not classified as hazardous for water transportation.

Environmental hazards: It's not considered a marine pollutant for transportation.

Air: IATA - International Air Transport Association:
• DGR - Dangerous Goods Regulation.

UN number: Not classified as dangerous for air transport.

Environmental hazards: The product is not considered dangerous for the environment for air transport.

Special precautions for user: Not applicable.

Maritime transport in bulk according to IMO instruments: Consult regulations:
• International Maritime Organization: MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, 2006;
• International Maritime Organization: IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk: With Standards and guidelines relevant to the code. IMO, London, 2007.

15 - REGULATORY INFORMATION

Convention concerning Safety in the use of Chemicals at Work (Convention 170) - International Labour Organization, 1990.

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16 - OTHER INFORMATION

This document was prepared based on current knowledge about the proper product handling and under normal conditions of use, in accordance with the application specified on the packaging. Any other use of the product involving their combination with other products, and use various forms of those indicated, are the responsibility of the user. Warns that the handling of any chemical substance requires the prior knowledge of its hazards for the user. In the workplace it is for the user company's product promotes training of its collaborators about the possible risks arising from exposure to the chemical.

Change control:

Version	Manufacture date	Changes
1.0e	01/23/2025	Elaboration

Abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists;
CAS - Chemical Abstracts Service;
EC - European Community;
EC₅₀- Effective concentration of substance that causes 50 % of the maximum response;
EEC - European Economic Community;
EPA - United States Environmental Protection Agency;
IARC - International Agency for Research on Cancer;
K_{ow}- Octanol-water partition coefficient;
LC₅₀- Lethal Concentration 50%;
LD₅₀- Lethal Dose 50%;
NIOSH - National Institute for Occupational Safety and Health;
NOEC - No Observed Effect Concentration;
OSHA - Occupational Safety & Health Administration;
TLV - Threshold Limit Value;
TWA - Time Weighted Average;
UN - United Nations.

Bibliographic references:

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on the Documentation of the Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Cincinnati-USA, 2024.

CONCAWE - HAZARD CLASSIFICATION AND LABELLING OF PETROLEUM SUBSTANCES IN THE EUROPEAN ECONOMIC AREA. Available in: <<https://www.concawe.eu/>>. Access at: May. 2024.

ECHA - EUROPEAN CHEMICAL AGENCY. Available in: <<http://echa.europa.eu/web/guest>>. Access at: May. 2024.

EPA - UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. Available in: <<https://www.epa.gov/>>. Access at: May. 2024.

GESTIS - SUBSTANCE DATABASE. Available in: <<https://gestis-database.dguv.de/>>. Access at: May. 2024.

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 10th rev. ed. New York and Geneva: United Nations, 2023.

HSDB - HAZARDOUS SUBSTANCES DATA BANK. Available in: <<http://pubchem.ncbi.nlm.nih.gov/>>. Access at: May. 2024.

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IARC - INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. Available in:
<<http://monographs.iarc.fr/ENG/Classification/index.php>>. Access at: May. 2024.

NIOSH - NATIONAL INSTITUTE OF OCCUPATIONAL AND SAFETY. International Chemical Safety Cards. Available in:
<<http://www.cdc.gov/niosh/>>. Access at: May. 2024.

OSHA - OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION. UNITED STATES DEPARTMENT OF LABOUR. <
<https://www.osha.gov/chemicaldata/search>>. Access at: May. 2024.

REACH - REGISTRATION, EVALUATION, AUTHORIZATION AND RESTRICTION OF CHEMICALS. Commission Regulation (EC) No 1272/2008 of December 2008 amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals. Available in: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>>. Access at: May. 2024.