

PHOENIX BIODIESEL (B2) EURO-4

1. Product Name and Company Details

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| Company Name: | Phoenix Petroleum Philippines Incorporated |
| Head Office: | Phoenix Bulk Depot, Lanang, Davao City, 8000 |
| Product Name: | DIESEL EURO-4 |
| Trade Name: | BIODIESEL (B2) EURO-4 |
| Chemical Family: | Petroleum Hydrocarbon |
| Product Classification: | Petroleum Distillate with Performance Additives |
| Emergency Number: | +63 (82) 235 8888, +63 (82) 233 0168 |
| E-mail: | info@phoenixfuels.ph |

2. Composition / Information on Ingredients

Substance: The product is consist of aliphatic, alicyclic, and aromatics hydrocarbons. It composed of distillate and residual fractions blended to achieve the prescribed viscosity ranges. In general this product is combustible, may contain carcinogenic components and most likely contain trace amount of hydrogen sulfide.

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| Fatty Acid Methyl Ester, %volume | 0-2.2% |
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3. Hazards Identification

Classification of the substance: According to Regulation (EC) No. 1272/2008 (CLP)

Flam. Liq. 1; H224
 Asp. Tox. 1; H304
 Skin Irrit. 2; H315
 STOT SE 3; H336
 Muta. 1B; H340
 Carc. 1B; H350
 Repr. 2; H361fd
 Aquatic Chronic 2; H411

According to Directive 67/548/EEC & Directive 1999/45/EC

F+; R12
 Carc. Cat. 2; R40
 Muta. Cat. 2; R46
 Repr. Cat. 3; R63 – R63
 Xn; R65
 Xi; R38
 N; R51/53

Label elements

Hazard pictogram(s):

According to Regulation (EC) No. 1272/2008 (CLP)



Signal word(s):

Danger

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Hazard Statement(s): H224: Extremely flammable liquid and vapor.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H336: May cause drowsiness or dizziness.
 H340: May cause genetic defects.
 H350: May cause cancer.
 H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
 H411: Toxic to aquatic life with long lasting effects.

Precautionary statement(s): P201: Obtain special instructions before use.
 P210: Keep away from heat, sparks, open flame, hot surfaces - No smoking.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
 P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
 P501: Dispose of contents/container to: Disposal should be in accordance with local, state or national legislation.

Label elements

Hazard pictogram(s):

According to Directive 67/548/EEC & Directive 1999/45/EC



Hazard symbol: Extremely flammable. Dangerous for the environment.

Risk phrases: R12: Extremely flammable.
 R38: Irritating to skin.
 R45: May cause cancer.
 R46: May cause heritable genetic damage.
 R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R62: Possible risk of impaired fertility.
 R63: Possible risk of harm to the unborn child.
 R65: Harmful: may cause lung damage if swallowed.
 R67: Vapors may cause drowsiness and dizziness.

Safety phrases: S2: Keep out of the reach of children.
 S23: Do not breathe fumes/vapor.
 S24: Avoid contact with skin.
 S29: Do not empty into drains.
 S36/37: Wear suitable protective clothing and gloves.
 S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 S51: Use only in well-ventilated areas.
 S53: Avoid exposure - obtain special instructions before use.
 S61: Avoid release to the environment. Refer to special instructions/Safety Data Sheets.
 S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Other hazards: Vapor may create explosive atmosphere. The vapor is heavier than air; beware of pits and confined spaces. May cause irritation to eyes and air passages.

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4. First Aid Measures

Description of first aid measures

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| Inhalation: | Remove patient from exposure, keep warm and at rest. If symptoms persist, obtain medical attention. |
| Skin contact: | Remove contaminated clothing immediately and drench affected skin with plenty of water, then wash with soap and water. If symptoms persist, obtain medical attention. Contaminated clothing should be thoroughly cleaned. |
| Eye contact: | If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. If symptoms persist, obtain medical attention. |
| Ingestion: | Obtain immediate medical attention. Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. |

Most important symptoms and effects, both acute and delayed

Aspiration hazard. Irritating to skin. May cause irritation to eyes and air passages.

Indication of the immediate medical attention and special treatment needed

If breathing is labored, oxygen should be administered by qualified personnel. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. Fire-Fighting Measures

Extinguishing media Suitable extinguishing media:

Foam, CO₂ or dry powder.
For large fire use: Water.

Unsuitable extinguishing media:

Do not use water jet.

Special hazards arising from the substance

Vapor may create explosive atmosphere. The vapor is heavier than air; beware of pits and confined spaces.

Advice for fire fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep fire exposed containers cool by spraying with water.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition. Vapor may create explosive atmosphere. The vapor is heavier than air; beware of pits and confined spaces. Ensure adequate ventilation. Use nonsparking hand tools and explosion proof electrical equipment. Take precautionary measures against static discharges.

Avoid inhalation of vapors. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves. (See Section: 7). Contaminated clothing should be thoroughly cleaned.

Environmental precautions

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.



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Methods and materials for containment and clean up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Sweep up carefully with non-sparking tools. Transfer to a container for disposal. Wash spill area with soapy water. Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorized waste disposal contractor.

7. Handling and Storage

Precautions for safe handling

Eliminate sources of ignition. Vapor may create explosive atmosphere. The vapor is heavier than air; beware of pits and confined spaces. Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Use non-sparking hand tools and explosion proof electrical equipment. Take precautionary measures against static discharges.

Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulators), and may form ignitable vapor-air mixtures in storage tanks or other containers. Precautions to prevent static-imitated fire or explosion during transfer, storage or handling, include but are not limited to these examples:

- (1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators.
- (2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such gasoline or naphtha).
- (3) Storage tank level floats must be effectively bonded.

Avoid inhalation of vapors. Avoid contact with skin and eyes.

Do not eat, drink or smoke at the work place. Wash hands and exposed skin after use. Contaminated clothing should be thoroughly cleaned.

Wear suitable protective clothing and gloves. (See Section: 7).

Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Keep from direct sunlight. Keep only in the original container in a cool, well ventilated place. Keep/store away from: Oxidizing agents.

Reports suggest that government-mandated ethanol, if present, may not be compatible with fiberglass gasoline tanks. Ethanol may dissolve fiberglass resin, causing engine damage and possibly allow leakage of explosive gasoline.

Specific end use(s)

8. Exposure Controls/Personal Protection

Control parameters

No occupational exposure limit assigned.

Exposure controls Appropriate engineering controls

Provide adequate ventilation, including appropriate local Extraction, to ensure that the occupational exposure limit is not exceeded.

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Personal protection

Eye/face protection



Goggles giving complete protection to eyes. (EN 166)

Skin protection



Protective gloves. (EN 374)

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. (BS EN 14387:2004+A1)

Other:

Apron or other light protective clothing, boots and plastic or rubber gloves.

Environmental exposure controls

Avoid release to the environment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

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|---------------------------------------|----------------------------------|
| Physical State at 20°C | Liquid |
| Water Solubility | Insoluble |
| Density at 15°C, kg/L | 0.8450 |
| Odor | Characteristic Petroleum product |
| Vapor Pressure at 37.8°C, kPa | Not Applicable |
| Viscosity at 40°C, mm ² /s | 3.440 |
| Pour Point, °C | -8 |

10. Stability and Reactivity

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| Reactivity | Reacts with strong oxidizing agents. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | No information available. |
| Conditions to avoid | Keep away from heat, sources of ignition and direct sunlight. |
| Incompatible materials | Oxidizing agents. |
| Hazardous decomposition byproduct(s) | May give off toxic fumes in a fire. Carbon monoxide, Carbon dioxide and various hydrocarbons. |

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11. Toxicological Information

Information on toxicological effects

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| Acute Toxicity: Ingestion | LD ₅₀ (oral/rat): 7600 mg/kg (API, 1980a, b) |
| Inhalation | LC ₅₀ (inhalation/rat):_ 4.1 mg/l/4 h (ARCO, 1988) |
| Skin contact | LD ₅₀ (dermal/rabbit): 4300 mg/kg (API, 1980a,b) |
| Eye contact | No information available. |
| Skin irritation: | Irritating to skin. |
| Serious eye damage: | May cause eye irritation. |
| Respiratory or skin sensitization: | Negative. |
| Mutagenicity: | There is no evidence of mutagenic potential. |
| Carcinogenicity: | No evidence of carcinogenicity. |
| Reproductive toxicity: | Negative. |
| STOT-single exposure: | Negative. |
| STOT-repeated exposure: | May cause damage to organs through prolonged exposure. |
| Aspiration hazard: | Risk of aspiration. Aspiration of liquid may cause oedema. |

12. Ecological Information

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| Toxicity | LC ₅₀ : (Rainbow trout): 1-10 mg/l/96h EC ₅₀ (Daphnia magna): 1-10 mg/l/48h NOEL: 0.083 mg/l/14 days WGK: Not established. |
| Persistence and degradability | Persistent. Not readily biodegradable. Part of the product is poorly biodegradable. |
| Bioaccumulative potential | The product has potential for bioaccumulation. Log K _{ow} |
| Mobility in soil | The product has low mobility in soil. |
| Results of PBT and vPvB assessment | Half-life: 1.2-2.7 days. |

13. Disposal Considerations

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| Waste treatment methods | Do not empty into drains; dispose of this material and its container in a safe way. To be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation. |
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**14. Transport Information**

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| UN Number | 1203 |
| Proper shipping name | Petrol |
| Transport hazard class(es) | 3 |
| Environmental hazard(s) | II |
| Special precautions for user | Vapour may create explosive atmosphere. The vapour is heavier than air; beware of pits and confined spaces. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: | Not applicable. |

15. Regulatory Information

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| Safety, health and environmental regulations/legislation specific for the substance or mixture | When used for its intended purposes, this material is not classified as hazardous. |
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16. Other Information

Not applicable

However, no representation, warranty or guarantee is more as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

REV.1 effective February 2018

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