

**SAFETY DATA SHEET**  
**DIESEL FUEL OIL**



**I. PRODUCT AND COMPANY IDENTIFICATION**

**Product name** : Diesel.  
**Trade name** : Gasoil 0.05PCT Sulphur; Gasoil 0.001PCT Sulphur  
**Other name** : Gasoil 500PPM; Gasoil 10PPM  
**Supplier's name, address** : Vietnam National Petroleum Group  
N°1- Kham Thien Str.- Van Mieu Quoc Tu Giam Ward.-  
Hanoi  
**Contact, Routine inquiries** : Vietnam National Petroleum Group  
N°1- Kham Thien Str.- Van Mieu Quoc Tu Giam Ward.-  
Hanoi  
Tel. 024 3851 2603 Fax. 024 3851 9203  
**CAS number** : 68476-34-6  
**UN number** : 1202  
**EC number** : 270-676-1  
**Intended use** : Fuel oil for diesel engines.

**II. HAZARDS IDENTIFICATION**

**National Fire Protection Association (NFPA)**

Health hazard: 1  
Flammable hazard: 2  
Reactivity: 0



**GHS Classification:**

Flammable liquid : Category 3  
Skin irritation : Category 2  
Acute toxicity (Inhalation) : Category 4  
Aspiration hazard : Category 1  
Carcinogenicity : Category 2  
Specific target organ toxicity (repeated exposure) : Category 2  
Aquatic Chronic : Category 2

**Pictogram:**



**Signal word** : Danger

**Hazard statements**

H226 : Flammable liquid and vapour  
H304 : May be fatal if swallowed and enters airways.  
H315 : Causes skin irritation.  
H332 : Harmful if inhaled.  
H351 : Suspected of causing cancer.  
H373 : May cause damage to organs through prolonged or repeated exposure.  
H411 : Toxic to aquatic life with long lasting effects.

**Prevention precautionary statements**

- P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 : Keep container tightly closed.
- P240 : Ground and bond container and receiving equipment.
- P241 : Use explosion-proof electrical/ventilating/lighting... equipment.
- P242 : Use only non-sparking tools.
- P243 : Take action to prevent static discharges.
- P261 : Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 : Wash hands thoroughly after handling.
- P271 : Use only outdoors or in a well-ventilated area.
- P273 : Avoid release to the environment.
- P280 : Wear protective gloves/protective clothing/eye protection/face protection/hearing protection...

**Response precautionary statements**

- P302 + P352 : If on skin: Wash with plenty of water and soap.
- P303 + P361 + P353 : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
- P304 + P340 : If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P331 : Do NOT induce vomiting.
- P362 + P364 : Take off contaminated clothing and wash it before reuse.
- P370 + P378 : In case of fire: Use appropriate firefighting equipment to extinguish.
- P391 : Collect spillage.

**Storage precautionary statements**

- P403 + P235 : Store in a well-ventilated place. Keep cool
- P405 : Store locked up .

**Disposal precautionary statement**

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

**III. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical name	CAS number	Content
Diesel	68476-34-6	100 % volume
Aromatic compound		≤ 11 % weight (DO – V)
Sulfur	7704-34-9	≤ 500 mg/kg (DO – II) ≤ 10 mg/kg (DO – V)

**IV. FIRST AID MEASURES**

- Eye contact** : Take the victim to a safe, well-ventilated space with fresh air. Use clean water to rinse eyes for at least 15 minutes, then get immediate medical attention.
- Skin contact** : Remove contaminated clothes and shoes. Use water and soap to wash the part of skin exposed to the diesel oil. In case of allergic or if the skin is seriously damaged, get immediate medical attention.
- Inhalation contact** : Remove victim to fresh air, keep comfortable breathing. Loosen up the neck, tie or belt. If not breathing, or unusual breathing, immediately take the artificial respiration (shall be implemented by trained staff of first

<b>Ingestion contact</b>	aid). Get immediate medical attention. : Thoroughly rinse mouth by water. Do not induce vomiting, it might cause the complication of lung unless have the instruction of medical. Do not put anything to mouth while unconscious statement. Get immediate medical attention.
<b>Note</b>	: A supporter can get danger while implement artificial respiration. Get medical attention.

## V. FIRE FIGHTING MEASURES

<b>Toxic chemical might be produced</b>	: CO <sub>x</sub> , Hydrocacbon, H <sub>2</sub> S and a little metal.
<b>Fire extinguishing agents</b>	: Use fire extinguisher and specialized fire fighting equipment, CO <sub>2</sub> , sand, fire blanket .
<b>Fire fighting methods</b>	<ul style="list-style-type: none"> <li>- Take initial emergency response to isolate, extinguish the fire.</li> <li>- Cut off the power source related to the fire.</li> <li>- Prioritize in rescuing victims, preventing and isolating the diesel oil's source of leakage, if possible remove others nearby containers and equipment.</li> <li>- Use fire extinguisher, sand, fire blanket to extinguish the small fire.</li> <li>- Do not use water to extinguish, only use water spray to cool down the fire-exposed surfaces of surroundings containers and equipment.</li> <li>- Call and inform the Fire service to ask for assistance.</li> </ul>
<b>Required equipment, protection gears in case of fire</b>	: Fixed fire fighting equipment, fire truck, dry powder wheeled fire extinguisher ≥ 25kg, CO <sub>2</sub> extinguisher, powder extinguisher 6-10kg, sand, buckets, fire blanket etc. Use flame resistant clothing, protection helmet with eye protection, gloves etc.
<b>Special attention notice:</b>	: The diesel oil's vapor is highly flammable, heavier than air and can move far away from the leaked source. If encountered with a fire source may cause fire outbreak to the leaked source.

## VI. ACCIDENTAL RELEASE MEASURES

<b>Small spill</b>	<ul style="list-style-type: none"> <li>- Take all possible measures to stop the source of the spill or leakage. Ventilate the affected area.</li> <li>- Isolate the spill/leak area. Assign supervisor and warn others about hazardous zone .</li> <li>- Eliminate all sources of ignition and sparks during spill or leak incidents.</li> <li>- Use dry sand, rags, or specialized absorbent materials to clean up the spill as quickly as possible, then collect the waste into specialized containers for proper disposal.</li> <li>- Prevent the diesel oil from leaking to enter drainage systems, canals, or waterways.</li> </ul>
<b>Large spill</b>	<ul style="list-style-type: none"> <li>- Cut off electrical power and cease all operation of transferring diesel oil.</li> <li>- Isolate the spill/leak area and prepare fire prevention and firefighting plan, measures.</li> <li>- Implement protective actions for the affected area, prevent the spread of diesel oil, and carry out recovery efforts in accordance with the facility's oil spill response</li> </ul>

plan.

- Inform the local authorities for assistance to handle the incident .

## VII. HANDLING AND STORAGE

### Measures and applied conditions while handle chemical

- Open containers slowly to release internal vapor pressure.
- Only transfer diesel oil using specialized containers. Use anti-static grounding systems when loading or unloading diesel oil into transportation vehicles.
- During the loading and unloading process, it is strictly prohibited to: start the vehicle's engine, check the power source, perform maintenance, or clean vehicles.
- No fire, no smoking, and no use of portable electrical or telecommunication devices that are not explosion-proof in hazardous areas.
- Prevent any spillage, leakage, or splashing of diesel oil.

### Measures and applied conditions while stored chemical

- Do not siphon diesel oil by mouth.
- Always wear appropriate personal protective equipment (PPE) when getting into contact diesel oil. Wash hands and clean up thoroughly after work.
- Store diesel oil only in designated, sealed containers. Store in a dry, well-ventilated, and cool area.
- Prevent diesel oil containers from strong impacts. Keep away from heat sources, sparks, and strong oxidizing agents.
- Install an automatic fire detection and alarm system.
- Comply with the Government's requirements on fire protection and fire fighting, environment protection, oil spill prevention when operating petroleum facilities.
- Fire fighting equipment must be fully equipped following the Government's requirements when handling, transferring, storing the petroleum products .

## VIII. EXPOSURE CONTROL AND PERSONAL PROTECTION

### Control parameters:

Components	CAS number	Type of exposure	Value (ppm)	Standard
Diesel	68476-34-6	Respiration	100 (TWA)	ACGIH

### Personal protection for working:

- Eye protection : Specialized protection equipment is not required. Goggles are recommended in necessity case.
- Body protection : Use protective clothing.
- Hand protection : Use protective gloves.
- Personal protection for responding incident : The oil spill response team, fire fighting team must be equipped with specialized tool and equipment when approaching and handling the incident..
- Sanitation measures : Wash hands with soap and clean up after getting into contact with diesel oil.

## IX. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Colour : Pure, clear, light yellow
- Odour : Characteristic odour of Diesel
- Vapour pressure :  $\leq 1$
- Vapour density relative (Air = ) :  $\geq 1$

1)	
<b>Solubility rate in water</b>	: Insoluble
<b>pH</b>	: Not applicable
<b>Density at 15°C (kg/m<sup>3</sup>)</b>	: 820 – 860 (DO-II); ≤ 845 (DO-V)
<b>Boiling point (°C)</b>	: Not applicable
<b>Freezing point/ Melting point (°C)</b>	: ≤ + 3 (winter, spring), ≤ + 12 (summer, autumn)
<b>Flash point (°C)</b>	: ≥ 55
<b>Auto-ignition point (°C)</b>	: Not available
<b>Upper explosion limit</b>	: 7,5
<b>Lower explosion limit</b>	: 0,6
<b>Kinematic viscosity at 40°C (mm<sup>2</sup>/s)</b>	: 2,0 – 4,5
<b>Cetane number</b>	: ≥ 46 (DO-II)
<b>Boiling point (95% volume, °C)</b>	: ≤ 360 (DO-V)
<b>Boiling point (90% volume, °C)</b>	: ≤ 360 (DO-II)
<b>Copper corrosion at 50°C in 3 hours, max</b>	: Type 1
<b>Lubricity (µm)</b>	: ≤ 460

## X. STABILITY AND REACTIVITY

<b>Incompatible chemical</b>	: Acid, strong oxidizing agent.
<b>Stability</b>	: This product is stable under normal temperature, pressure and used conditions that have been recommended.
<b>Dangerous reaction</b>	: May cause corrosion or explosion; may react with the surrounding environment. Emits toxic carbon monoxide (CO) when burned.
<b>Decomposition reaction and its product</b>	: Combustion releases heat and produces carbon monoxide (CO) and carbon dioxide (CO <sub>2</sub> ).

## XI. TOXICOLOGICAL INFORMATION

<b>Mouth route</b>	: Not available.
<b>Inhalation route</b>	: Not available.
<b>Skin route</b>	: Not available.
<b>Chronic effect to human</b>	: May cause cancer depending to exposure concentrations and exposure time.
<b>Other toxicity</b>	: Not available.

## XII. ECOLOGICAL INFORMATION

<b>For animal</b>	: Not available.
<b>Biodegradable</b>	: The product is biodegradable in the short term and is not considered hazardous. However, prolonged biodegradation over time may increase its toxicity.
<b>Bioaccumulation</b>	: Not available.
<b>Mobility in soil</b>	: Not available.

## XIII. DISPOSAL INFORMATION

- Do not put into pond, lake, drainage and sewage system.
- The disposal process must follow the procedure and general standard about chemical's disposal specified in the Law on Environment protection, assuring the safety for human and environment.

## XIV. TRANSPORT INFORMATION

<b>Vietnam Regulations</b>	: Decree No. 34/2024/ND-CP dated March 31 <sup>st</sup> 2024 of the Government providing the List of dangerous goods
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and the transport of dangerous goods by inland waterway vessels

- Proper Shipping Name: Diesel fuel
- UN number 1202
- Class: 3
- Labels: 3
- Hazard identification number: 30

: Decree No. 161/2024/ND-CP dated December 18<sup>th</sup> 2024 of the Government providing the List of dangerous goods, transport of dangerous Goods and the procedures for granting licenses and certificates of completion of training programs for drivers or escorts transporting dangerous goods on roads.

- Proper Shipping Name: Diesel fuel
- UN number 1202
- Class: 3
- Labels: 3
- Hazard identification number: 30

#### International Regulations

- USA, DOT Shipping Description: UN 1202, Diesel, 3, III.
- IMO/IMDG Shipping Description: UN 1202, Diesel, 3, III.
- IATA/ICAO: UN 1202, Diesel, 3, III.

### XV. REGULATORY INFORMATION

#### Vietnam Regulations

- Law No.69/2025/QH15 on chemical.
- Law No.84/2015/QH13 on occupational safety and hygiene.
- Law No.72/2020/QH14 on environmental protection.
- Law No.55/2024/QH15 on Fire prevention and fighting, rescue and salvage.

#### International Regulations

: Not available

### XVI. OTHER INFORMATION

**Date of compilation :** June 1<sup>st</sup> 2026

**Name of organization, individual responsible for drafting:**

VIETNAM NATIONAL PETROLEUM GROUP (PETROLIMEX)

#### **DISCLAIMER FOR USER:**

- The information and recommendations in this Material Data Safety Sheet are, to the best knowledge and belief, accurate and reliable as of the date issued, and must be used to apply methods preventing risk, accident.

- Dangerous chemical presented in this sheet might have others dangerous properties under the control of the user.

- **Petrolimex shall not be held responsible for any damage resulting from abnormal use of the recommendations presented in this Material Data Safety Sheet.**

