

SAFETY DATA SHEET

KEROSENE



PETROLIMEX

I. PRODUCT AND COMPANY IDENTIFICATION

Product name	: Kerosene
Trade name	: Kerosene KO (Kerosene 1-K; Kerosene 2-K)
Other name	: Paraffin, Lamp oil, Coal oil.
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	: 8008-20-6
UN number	: 1223
EC number	: 232-366-4
Intended use	: Used as fuel for lighting and heating, and as an industrial solvent.

II. HAZARDS IDENTIFICATION

National Fire Protection Association (NFPA)

Health hazard: 2

Flammable hazard: 2

Reactive hazard: 0



GHS Classification:

Flammable liquid : Category 3

Skin irritation : Category 2

Acute Toxicity – Inhalation : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity – single exposure : Category 3

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.

H336 : May cause drowsiness or dizziness.

- H351 : Suspected of causing cancer.
 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

- P303 + P361 + P353 : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P302 + P352 : If on skin: Wash with plenty of water and soap.
 P332 + P313 : If skin irritation occurs: Get medical advice/attention.
 P370 + P378 : In case of fire: Use appropriate firefighting equipment to extinguish.

Storage precautionary statements

- P403 + P235 : Store in a well-ventilated place. Keep cool
 P403 + P233 : Store in a well-ventilated place. Keep container tightly closed.
 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
Kerosene	8008-20-6	100% volume

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 gasoline. 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

Ingestion contact

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.

V. FIRE FIGHTING MEASURES

Toxic chemical might be produced

: CO, CO₂

Fire extinguishing agents

: Use fire extinguisher and specialized fire fighting equipment, CO₂, sand, fire blanket .

Fire fighting methods

- Take initial emergency response to isolate, extinguish the fire.
- Cut off the power source related to the fire.
- Prioritize in rescuing victims, preventing and isolating the kerosene's source of leakage, if possible remove others nearby containers and equipment.
- Use fire extinguisher, sand, fire blanket to extinguish the small fire.
- Do not use water to extinguish, only use water spray to cool down the fire-exposed surfaces of surroundings containers and equipment.
- Call and inform the Fire service to ask for assistance.

Required equipment, protection gears in case of fire

: Fixed fire fighting equipment, fire truck, dry powder wheeled fire extinguisher ≥ 25kg, CO₂ extinguisher, powder extinguisher 6-10kg, sand, buckets, fire blanket etc. Use flame resistant clothing, protection helmet with eye protection, gloves etc.

Special notes on fire and explosion

: Flammable liquid and vapor. When burning or heated, pressure inside containers may increase and they may rupture, posing a risk of explosion and fire spread. Spilled fuel entering drainage systems may create fire or explosion hazards. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along the ground or float on water surfaces to distant ignition sources. Vapors may accumulate in low-lying or confined areas and may travel considerable distances to ignition sources, causing flashback fires. This product has low electrical conductivity and may accumulate static charge. If sufficient charge accumulates, a flammable mixture may ignite. Proper grounding and bonding procedures should be followed to reduce the risk of static discharge. This liquid can generate static electricity when transferred into properly grounded containers. The potential for static accumulation increases significantly in the presence of small amounts of water or other contaminants.

The liquid floats on water and may reignite on the water surface.

VI. ACCIDENTAL RELEASE MEASURES

Small spill

- Take all possible measures to stop the source of the spill or leakage. Ventilate the affected area.
- Isolate the spill/leak area. Assign supervisor and warn others about hazardous zone.
- Eliminate all sources of ignition and sparks during spill or leak incidents.
- 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.
- Prevent the kerosene from leaking to drainage systems, canals, or waterways.

Large spill

- Cut off electrical power and stop all loading, unloading, and transfer operations by all available means.
- Isolate the spill/leak area and prepare fire prevention and firefighting plan, measures.
- Implement protective actions for the affected area, prevent the spread of oil, and carry out recovery efforts in accordance with the facility's oil spill response 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 kerosene using specialized containers. Use anti-static grounding systems when loading or unloading fuel 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 kerosene.
- Do not siphon kerosene or fuel by mouth.
- Always wear appropriate personal protective equipment (PPE) when handling fuel. Wash hands and clean up thoroughly after work.

Measures and applied conditions while stored chemical

- Store kerosene only in specialized, sealed containers. Store in a dry, well-ventilated, and cool area.
- Prevent kerosene 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 petroleum products.

VIII. EXPOSURE CONTROL AND PERSONAL PROTECTION

Control parameters	: Not available.
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 fuel oil.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid
Colour	: Pure, clear
Odour	: Kerosene-like
Vapour pressure (kPa, 20°C)	: Not available
Vapour density relative (Air = 1)	: Not available
Solubility rate in water	: Not available
pH	: Not applicable
Density at 15°C (g/cm³)	: Report
Boiling point (°C)	: ≤ 300
Melting point (Freezing point) (°C)	: Not applicable
Flash point (°C)	: ≥ 38
Auto-ignition point (°C)	: Not available
Upper explosion limit	: Not available
Lower explosion limit	: Not available
Kinematic viscosity (at 40°C, cst)	: 0,8 – 1,9
Copper corrosion (at 100°C, in 3 hours)	: Type 3

X. STABILITY AND REACTIVITY

Stability	: This product is stable under normal conditions.
Conditions to avoid	: Avoid high temperatures. Keep away from ignition sources (sparks, open flames).
Incompatible Materials	: Oxidizing agents.

XI. TOXICOLOGICAL INFORMATION

Mouth route	: Not available.
Inhalation route	: Not available.
Skin route	: Not available.
Other toxicity	: May cause cancer. Cancer risk depends on concentration and duration of exposure. May cause dizziness and nausea. Causes skin irritation. May be harmful or fatal if aspirated into the lungs.

XII. ECOLOGICAL INFORMATION

For animal	: Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic ecosystem.
Biodegradable	: The product is considered to be biodegradable
Bioaccumulation	: Does not bioaccumulate through the food chain in the environment.
Mobility in soil	: 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

Vietnam Regulations	<p>: Decree No. 34/2024/ND-CP dated March 31st 2024 of the Government providing the List of dangerous goods and the transport of dangerous goods by inland waterway vessels</p> <ul style="list-style-type: none"> - Proper Shipping Name: Kerosene - UN number 1223 - Class : 3 - Labels : 3 - Hazard identification number: 30 <p>: Decree No. 161/2024/ND-CP dated December 18th 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.</p> <ul style="list-style-type: none"> - Proper Shipping Name: Kerosene - UN number 1223 - Class : 3 - Labels : 3 - Hazard identification number: 30
International Regulations	<ul style="list-style-type: none"> - IMO/IMDG Shipping Description: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, KEROSENE, RESIDUAL, 9, III.

XV. REGULATORY INFORMATION

Vietnam Regulations	<ul style="list-style-type: none"> - Law No.69/2025/QH15 on chemical. - Law No.84/2015/QH13 on occupational safety and
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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 1st 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.**

