

PETROMATE OIL IMPROVER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Name	PETROMATE OIL IMPROVER
Product Type	Petroleum Hydrocarbons with Additives
Recommended Use	Engine Oil Additive
Company Information	PETRON CORPORATION San Miguel Head Office Complex 40 San Miguel Avenue, Mandaluyong City PHILIPPINES
General Contact Numbers	(632) (02)-884-9200
Website	www.petron.com

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION	Acute Toxicity - Oral, Category 5 Acute Toxicity - Dermal, Category 5 Acute Toxicity - Inhalation, Category 4 Skin Corrosion/Irritation, Category 3 Serious Eye Damage/Eye Irritation, Category 2B Carcinogenicity, Category 2 Specific Target Organ Toxicity (Repeated Exposure)Category 2 blood, lungs, liver, bone marrow, stomach), Hazardous to the Aquatic Environment Acute Hazard, Category 3 Chronic Hazard, Category 3
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GHS LABELING

Symbol(s)



Signal Word

Warning

Hazard Statements	H303	May be harmful if swallowed
	H332	Harmful if inhaled
	H316	Causes mild skin irritation
	H320	Causes eye irritation
	H351	Suspected of causing cancer
	H373	May cause damage to organs (skin, lungs, blood, liver, CNS) through prolonged or repeated exposure
	H412	Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS

General Precautionary Statements

P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use

Prevention Precautionary Statements



P304 + P312 IF INHALED: Call a Poison Center or Physician if you feel unwell
P312 Call a Poison Center or Physician if you feel unwell

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Composition	CAS Number	% Weight
Distillates (Petroleum) solvent refined heavy paraffinic	64741-88-4	65 - 77
1-Decene, Homopolymer, Hydrogenated	68037-01-4	20 - 32
Zinc Alkyl Dithiophosphate	68649-42-3	< 2
Ethoxylated Tallow Amine	61791-26-2	< 1

In general, the product contain components that may be a significant health and safety hazard thus proper handling petroleum products and observing precautions must be observed and good standards of industrial and personal hygiene must be maintained.

SECTION 4: FIRST AID MEASURES

Eye Contact	Immediately flush eyes with large amount of water for at least 15 minutes or until irritation subsides. If irritation persists, get prompt medical attention.
Skin Contact	Immediately flush with large amount of water; use soap if available. Remove contaminated clothing and shoes, and launder before reuse.
Ingestion	If swallowed, DO NOT induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get immediate medical attention. DO NOT attempt to give anything by mouth to an unconscious person.
Inhalation	This product is not expected to present an inhalation problem at ambient temperature. However, if overexposed to oil mist, using proper respiratory protection, immediately remove the affected person immediately to fresh air. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point, COC, °C	238
Extinguishing Media	In case of fire use foam, carbon dioxide or dry chemical extinguishers.
Special Fire-fighting Procedures	Water jets should not be used directly on igniting products. Avoid spraying water directly into storage containers due to danger of over-boil. However, water may be used to cool exposed containers, structures and equipment adjacent to fire. Respiratory and eye protection required for fire-fighting personnel.
Decomposition Products Under Fire Conditions	Fumes, smoke, oxides of sulfur, nitrogen, carbon and other toxic gases may be formed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill	Taking normal safety precaution, eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills, implement cleanup procedures. For large spills, implement
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clean-up procedures and, if in public area, keep public away and advise authorities. Prevent liquid from entering sewers, water courses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with a suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Water Spill

Use booms to confine spills immediately. Remove from water surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION 7: HANDLING AND STORAGE

Handling Procedures

Keep away from potential sources of ignition. Open container in a well-ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Wash thoroughly after handling. "Empty" containers with retained product residue (liquid or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause death or injury. Empty drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner, or properly disposed off.

Storage Procedures

Do not store near potential sources of ignition. Store in a well-ventilated area. Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 60°C for extended periods of time or if heat sources in excess of 70°C are used.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Controls

Components	CAS-No.	Source	Value
Distillates (Petroleum) solvent refined heavy paraffinic	64741-88-4	ACGIH	5mg/m ³
		OSHA	10 mg/m ³ (STEL) 5mg/m ³
Zinc Alkyl Dithiophosphate	68649-42-3	ACGIH	5 mg/m ³ (TLV)
		OSHA	10 mg/m ³ (STEL) 5 mg/m ³ (PEL)

Personal Protection

- Ventilation Procedures The use of local exhaust ventilation is recommended to control mists or vapors. Additional ventilation or exhaust may be required to maintain air concentrations below exposure limits.
- Respiratory Protection Use NIOSH/OSHA approved full-face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
- Hand Protection Use chemical resistant gloves.
- Eye Protection Where contact may occur, wear safety glasses with side shields.



Clothing Recommendation

Wear either a chemical protective suit or apron when potential for contact with material exists. Use neoprene or nitrile rubber boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear
Odor	Characteristic of petroleum products
Density at 15°C, kg/L	0.8812
Flash Point, °C	238
Boiling Point, °C	Not determined
Melting Point, °C	Not determined
Solubility in Water	Insoluble
Flammability	Non flammable
Partition Coefficient	Not determined
Auto-ignition Temp, °C	Not determined
Decomposition Temp, °C	Not determined

SECTION 10: STABILITY AND REACTIVITY

Stability	This product is stable and hazardous polymerization will not occur.
Incompatibility	Strong oxidizing agents
Polymerization	Not Applicable

SECTION 11: TOXICOLOGICAL INFORMATION

I. Acute Toxicity

Distillates (Petroleum) solvent-refined heavy paraffinic	Oral, LD50	>5000 mg/kg
	Dermal, LD50	>2000 mg/kg
	Inhalation, LC50	2.18 mg/L
Zinc Alkyl Dithiophosphate	Oral, LD50	>2000 mg/kg
	Dermal, LD50	>2000 mg/kg
	Inhalation, LC50	>5000 mg/m ³ (rat)
1-Decene, Homopolymer, Hydrogenated	Oral, LD50	2000 mg/kg
	Dermal, LD50	2000 mg/kg
	Inhalation, LC50	5 mg/L

Skin Corrosion/Irritation	Low order of toxicity. Frequent or prolonged contact may cause mild skin discomfort.
Serious Eye Damage/Irritation	Will cause eye discomfort; may injure eye tissue if not removed promptly
Respiratory/Skin Sensitization	There was no evidence of skin sensitization when the product was applied to human skin.
Germ Cell Mutagenicity	No available information
Aspiration Hazard	Minimal toxicity



Carcinogenicity

Distillates (Petroleum) solvent refined heavy paraffinic

Suspected of causing cancer
Classified by EU, Institute for Health & Consumer Protection as Carcinogenic Category 2; INCHEM similarly classifies as may cause cancer.

Reproductive Toxicity

No available information

Specific Target Organ Toxicity

. Avoid breathing vapor or mists. Repeated and prolonged over-exposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection.

SECTION 12: ECOLOGICAL INFORMATION

Acute Toxicity

Distillates (Petroleum) solvent-refined heavy paraffinic

Fish (LL ₅₀ /96-hours)	>100 mg/L (Pimephales promelas)
Crustaceans (EL ₅₀ /48-hours)	1000 mg/L (Daphnia magna)
Algae (EC ₅₀ /72-hours)	>1000 mg/L (Scenedesmus subspicatus)

Zinc Alkyl Dithiophosphate

Fish (LC ₅₀ /96-hours)	10-15 mg/L (Pimephales promelas)
Crustaceans (EC ₅₀ /48-hours)	1-1.5 mg/L (Daphnia magna)
Algae (EC ₅₀ /96-hours)	1-5 mg/L (Selenastrum capricornutum)

Environmental Mobility

Oil component of this product floats and can migrate from water to land.

Environmental Degradability

Data have not been determined specifically for this product, but it is not expected that it will be "readily" biodegradable.

Ecotoxicity & Bioaccumulation

Data have not been determined specifically for this product, but it is expected to be harmful to aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal

Material, if discarded, is expected to be hazardous waste due to toxicity. Waste management should be in compliance with local and national regulations.

SECTION 14: TRANSPORT INFORMATION

Land

This product is not regulated for road/rail transport.

Sea

IMDG (Packaged Goods and BLCs). This product is not regulated for sea transport.

Air

(ICAO/IATA). This product is not regulated for air transport.

SECTION 15: REGULATORY INFORMATION

Material is hazardous under Occupational Safety and Health (Classification, Labeling, and Safety Data Sheet of Hazardous Chemical) Regulations 2013.

The chemical substances present in this product are listed under Philippine Inventory of Chemicals and Chemical Substances (PICCS).



SECTION 16:**OTHER INFORMATION**

ApprovalsResearch and Development Department
Petron CorporationThis safety data sheet contains the following revisions **3**

This is a computer-generated form and does not require a signature.

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