

# PETROMATE ENGINE FLUSH

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

Product Name	<b>PETROMATE ENGINE FLUSH</b>
Product Type	Petroleum Hydrocarbons with Additives
Recommended Use	Engine System Cleaner
Company Information	PETRON CORPORATION San Miguel Head Office Complex 40 San Miguel Avenue, Mandaluyong City PHILIPPINES
General Contact Numbers	(632) 8-884-9200
Website	www.petron.com

## SECTION 2: HAZARDS IDENTIFICATION

<b>GHS CLASSIFICATION</b>	Flammable Liquids, Category 3 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 (Skin, lungs, blood, liver, CNS, 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	H226	Flammable liquid and vapor
	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**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye and face protection

**Response Precautionary Statements**

P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
P304 + P312	IF INHALED: Call a Poison Center or doctor/physician if you feel unwell.
P312	Call a Poison Center or doctor/physician if you feel unwell.
P370 + P378	In case of fire: Use foam, carbon dioxide or dry chemical extinguishers for extinction.

**Storage Precautionary Statements**

P403 + P235	Store in 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.
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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Composition	CAS Number	% Weight
Petroleum Naphtha	8030-30-6	40 - 64
Distillates (Petroleum) solvent refined heavy paraffinic	64741-88-4	30 – 51
1,2,4-trimethylbenzene	95-63-6	< 2
Zinc Alkyl Dithiophosphate	68649-42-3	2 - 5
Xylene	1330-20-7	< 2

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**

<b>Eye Contact</b>	Rinse eyes immediately with plenty of water for at least 15 minutes or until irritation subside. If irritation persists, get prompt medical attention.
<b>Skin Contact</b>	Immediately clean contaminated skin with soap and water. Remove contaminated clothing, including shoes, and launder before reuse.
<b>Ingestion</b>	If swallowed, DO NOT induce vomiting. Keep at rest and call for medical attention if large amount of the product is ingested.
<b>Inhalation</b>	If overexposed to oil mist, remove affected person immediately to fresh air. Administer artificial respiration if breathing is irregular or has stopped. Call for prompt medical attention.

**SECTION 5: FIRE-FIGHTING MEASURES**

<b>Flash Point, °C</b>	56
<b>Extinguishing Media</b>	In case of fire use foam, carbon dioxide or dry chemical extinguishers.
<b>Special Fire-fighting Procedures spraying</b>	Water jets should not be used directly on igniting products. Avoid water directly into storage containers due to danger of over-boil. This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.
<b>Decomposition Products Under Fire Conditions</b>	A complex mixture of gases may be formed when this product undergoes pyrolysis or combustion.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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<b>Land Spill</b>	Clear people away from the area. Do not operate electrical equipment unless flame-proof. Taking normal safety precautions shut off product flow. Prevent the liquid from entering sewers, water courses or low lying areas. Advise the relevant authorities, taking measures to minimize the effects on ground water. Recover from surface by skimming or pumping using explosion-proof equipment, booms or other suitable absorbent and remove mechanically into containers. If necessary, dispose material according to regulations of local authorities and environmental agencies .
<b>Water Spill</b>	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.

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**SECTION 7: HANDLING AND STORAGE**

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<b>Handling Procedures</b>	Keep away from potential sources of ignition. Open container in a well-ventilated area at temperatures not exceeding 50-60°C. Avoid breathing vapors. Keep containers closed when not in use. Prevent small spills and leakages to avoid slip hazard. 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.
<b>Storage Procedures</b>	Store in cool, well ventilated areas, away from sources of ignition at temperatures not exceeding 50 – 60°C.

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**SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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**Exposure Controls**

Components	CAS-No.	Source	Value
Distillates (Petroleum) solvent-refined heavy paraffinic	64741-88-4	ACGIH	5mg/m <sup>3</sup>
		OSHA	10 mg/m <sup>3</sup> (STEL) 5mg/m <sup>3</sup>



Petroleum Naphtha	8030-30-6	ACGIH OSHA	400 ppm 30 ppm TWA
1,2,4-trimethylbenzene	95-63-6	ACGIH OSHA	125 mg/m <sup>3</sup> 170 mg/m <sup>3</sup> (STEL) 120 mg/m <sup>3</sup>
Xylene	1330-20-7	ACGIH OSHA	434 mg/m <sup>3</sup> 655 mg/m <sup>3</sup> (STEL) 435 mg/m <sup>3</sup>
Zinc Alkyl Dithiophosphate	68649-42-3	ACGIH OSHA	5 mg/m <sup>3</sup> (TLV) 10 mg/m <sup>3</sup> (STEL) 5 mg/m <sup>3</sup> (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.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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Appearance	Clear, Red liquid
Odor	Cherry Scent
Kinematic Viscosity at 40 °C, cSt	6.701
Kinematic Viscosity at 100 °C, cSt	No data
Density at 15°C	0.8403
Flash Point, °C	56
pH	No data
Boiling Point, °C	No data
Melting Point, °C	No data
Vapor Pressure, kPa	No data
Vapor Density	No data
Solubility in Water	Insoluble
Evaporation Rate	No data
Flammability	Flammable
Partition Coefficient	No data
Auto-ignition Temperature, °C	No data



Decomposition Temperature, °C	No data
Explosion limits	No data

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**SECTION 10: STABILITY AND REACTIVITY**

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<b>Stability</b>	Material is normally stable at ambient temperature. Avoid temperatures above flash point.
<b>Incompatibility</b>	May react with strong oxidizing agents
<b>Polymerization</b>	Not Applicable
<b>Hazardous Decomposition Products</b>	In case of combustion or thermal decomposition, carbon monoxide and other harmful gases may be formed.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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**I. Acute Toxicity**

Distillates (Petroleum) solvent refined heavy paraffinic	Oral, LD50 >2000 mg/kg Dermal, LD50 >2000 mg/kg Inhalation, LC50 5 mg/L
Petroleum Naphtha	Oral, LD50 > 5000 mg/kg Dermal, LD50 > 2000 mg/kg Inhalation, LC50 5.2 mg/L
1,2,4-trimethylbenzene	Oral, LD50 5000 mg/kg Inhalation, LC50 18 mg/L
Xylene	Oral, LD50 5000 mg/kg Dermal, LD50 12400 mg/kg Inhalation, LC50 4550 ppm
Zinc Alkyl Dithiophosphate	Oral, LD50 > 2000 mg/kg Dermal, LD50 > 2000 mg/kg Inhalation, LC50 > 5000 mg/m <sup>3</sup>

**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** If mists are inhaled, slight irritation of the respiratory tract may occur. Studies indicate no signs of sensitization.

**Germ Cell Mutagenicity** Not expected to be a mutagen

**Aspiration Hazard** Ingestion is an unlikely event. However, accidental ingestion can lead to vomiting and aspiration into the lungs. This can result in chemical pneumonitis, which can be fatal.

**Carcinogenicity**

Xylene There were no significant effects on survival or mean body weights. There was no evidence of organ toxicity on histopathological examination or of any treatment-related increase in the incidence of neoplasia.



<b>Reproductive Toxicity</b>	Not expected to be a mutagen
<b>Specific Target Organ Toxicity</b>	Negligible hazard under ambient temperature conditions (-18 to 38°C; 0 to 100°F). 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.

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**SECTION 12: ECOLOGICAL INFORMATION**

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**Acute Toxicity**

Distillates (Petroleum) solvent-refined heavy paraffinic

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

Xylene

Fish (LC <sub>50</sub> /48-hours)	86 – 308 mg/L (Leuciscus idus melanotus)
Crustaceans (LC <sub>50</sub> /24-hours)	800 µg/L (Gammarus lacustris)
Algae (EC <sub>50</sub> /4 to 72-hours)	10 - 50 (Skeletonema costatum)

Zinc Alkyl Dithiophosphate

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

<b>Environmental Mobility</b>	Oil component of this product floats and can migrate from water to land.
<b>Environmental Degradability</b>	Data have not been determined specifically for this product, but it is not expected that it will be “readily” biodegradable.
<b>Ecotoxicity &amp; Bioaccumulation</b>	Data have not been determined specifically for this product, but it is expected to be harmful to aquatic organisms.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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<b>Waste Disposal</b>	Material, if discarded, is expected to be hazardous waste due to toxicity. Waste management should be in compliance with local and national regulations.
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**SECTION 14: TRANSPORT INFORMATION**

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<b>UN</b>	
UN Number	1268
Packing Group	II
Hazard Class	3
<b>IMDG</b>	
UN Number	1268
Hazard Class	3
Packaging Group	II



<b>IMDG-Labels</b>	<b>3</b>
<b>EmS</b>	<b>F-E-S-E</b>
<b>IATA Cargo Transport</b>	
<b>UN Number</b>	1268
<b>Hazard Class</b>	3
<b>Packaging Group</b>	II
<b>IATA Cargo Transport</b>	
<b>ICAO UN Number</b>	1268
<b>ICAO Packing Group</b>	II
<b>ICAO Hazard Class</b>	3
<b>Label</b>	Flammable liquid




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**SECTION 15: REGULATORY INFORMATION**

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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).

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**SECTION 16: OTHER INFORMATION**

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**Approvals** Research and Development Department  
Petron Corporation

This safety data sheet contains the following revisions **3**

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

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