

PETROMATE SUPER COOLANT

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

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| Product Name | PETROMATE SUPER COOLANT |
| Product Type | Ethylene Glycol with Additives |
| Recommended Use | Engine Coolant |
| Company Information | PETRON CORPORATION San Miguel Head Office Complex 40 San Miguel Avenue, Mandaluyong City PHILIPPINES |
| General Contact Numbers | (632) 802-7777 |
| Website | www.petron.com |

SECTION 2: HAZARDS IDENTIFICATION

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| GHS CLASSIFICATION | Acute Toxicity - Oral, Category 5 Acute Toxicity - Dermal, Category 5 Acute Toxicity - Inhalation, Category 5 Aspiration Hazard, Category 2 |
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GHS LABELING

Symbol(s)



Signal Word Warning

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|-------------------|------|---|
| Hazard Statements | H303 | Maybe harmful if swallowed |
| | H313 | Maybe harmful in contact with skin |
| | H333 | Maybe harmful if inhaled |
| | H305 | Maybe harmful if swallowed and enters airways |

PRECAUTIONARY STATEMENTS**General Precautionary Statements**

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| 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 |

Response Precautionary Statements

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| P312 | Call a Poison Center or doctor/physician if you feel unwell |
| P304 + P312 | IF INHALED: Call a Poison Center or doctor/physician if you feel unwell |
| P301 + P310 + P331 | IF SWALLOWED: Immediately call a Poison Center or doctor/physician. Do not induce vomiting |

Storage Precautionary Statements

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| P405 | Store locked up |
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Disposal Precautionary Statement

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Composition | CAS Number | % Weight |
|----------------------------|------------|----------|
| Distilled Water | 7732-18-5 | 57 – 68 |
| Ethylene Glycol | 107-21-1 | 30 - 40 |
| Potassium 2-ethylhexanoate | 3164-85-0 | 1 - 2 |
| Methyl-1H-benzotriazole | 29385-43-1 | < 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

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| Eye Contact | Rinse eyes immediately with plenty of water for at least 15 minutes or until irritation subside. If irritation persists, get prompt medical attention. |
| Skin Contact | Flush exposed area with water and follow by washing with soap if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. If skin irritation persists after washing, get medical advice. |
| Ingestion | DO NOT take internally. If swallowed, IMMEDIATELY contact a poison control center, emergency treatment center, or physician. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. |
| Inhalation | If overexposed to vapors, 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

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| Flash Point, COC, °C | Not applicable |
| Extinguishing Media | In case of fire, use foam, carbon dioxide, dry chemical or water spray. |
| Special Fire-fighting Procedures | Cool fire-exposed storage containers with water to prevent frothing. Fire-fighting should be done with necessary personnel protective equipment. |
| Decomposition Products under Fire Conditions | Harmful oxides of carbon and nitrogen may be released when burned. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

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| Land Spill | Taking normal safety precaution, shut off source of product. 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. Contain spilled liquid with sand or earth. Recover as much spill as possible for disposal. Wash residue or small spills with copious water. |
| Water Spill | Because the product is water soluble, spills must be confined immediately. Remove quickly from the water surface by skimming or with suitable |



absorbents. If permitted by local authorities and environmental agencies, disperse the residue in unconfined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION 7: HANDLING AND STORAGE

Handling Procedures

Open containers in well-ventilated areas. 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.

Storage Procedures

Store in cool, well-ventilated areas, away from sources of heat and ignition.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Controls

| Components | CAS-No. | Source | Value |
|-----------------|------------|--------|------------------------------|
| Ethylene Glycol | 64742-82-1 | ACGIH | 100mg/cm ³ (STEL) |

Personal Protection

Ventilation Procedures

Use local exhaust ventilation 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

In case of splashing, 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

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|--------------------------|---------------------------|
| Appearance | Clear green |
| Odor | Characteristic of glycols |
| Specific Gravity at 60°C | 1.0474 |
| pH | No data |
| Flash Point, °C | Not applicable |
| Boiling Point, °C | No data |
| Melting Point, °C | No data |
| Solubility in Water | Soluble |



| | |
|------------------------|----------------|
| Evaporation Rate | No data |
| Flammability | Not applicable |
| Decomposition Temp, °C | No data |

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| SECTION 10: | STABILITY AND REACTIVITY |
| Stability | Material is stable at normal conditions at ambient temperature and at higher temperatures below boiling point. |
| Incompatibility | May react with strong oxidizing agents. Mixing with chlorosulfonic acid, oleum or sulfuric acid in a sealed container causes temperature and pressure to rise. |
| Polymerization | Will not occur. |
| Hazardous Decomposition Products | In case of combustion or thermal decomposition, carbon monoxide and other gases may be formed. |

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| SECTION 11: | TOXICOLOGICAL INFORMATION |
| Acute Toxicity | |
| Distilled Water | Oral, LD50 >89100 mg/kg |
| Ethylene Glycol | Oral, LD50 4700 mg/kg Dermal, LD50 9530 mg/kg |
| Methyl-1H-benzotriazole | Oral, LD50 675 mg/kg Dermal, LD50 >4mg/kg |
| Skin Corrosion/Irritation | May cause slight irritation of the skin. If irritation occurs, a temporary burning sensation and minor redness and/or swelling may result. Other adverse effects not expected from brief skin contact. |
| Serious Eye Damage/Irritation | Known to be a mild irritant. If irritation occurs, a temporary burning sensation, minor redness, swelling, and/or blurred vision may result. |
| 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 | May be harmful or fatal if swallowed. Contains ethylene glycol which is toxic when swallowed. A lethal dose for an adult is 1 ml per kilogram or about 4 ounces (1/2 cup). Severe kidney damage can occur as a result of ingestion. Ingestion may result in nausea, vomiting and abdominal cramps. Metabolic acidosis and cardiopulmonary effects can occur following ingestion. May cause Central Nervous System (CNS) depression. |
| Carcinogenicity | No available information |
| Reproductive Toxicity | No available information |
| Specific Target Organ Toxicity | Negligible hazard under ambient temperature conditions (-18 to 38°C; 0 to 100°F). If overheated especially in the presence of water, hydrogen sulfide may be released. This can cause respiratory collapse, coma, even death without necessarily any odor being sensed. 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 |
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| Acute Toxicity | No data |
| 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 |
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| Waste Disposal | Large quantities of the product may be disposed off by mixing with more flammable solvents and atomizing into an incinerator. Small amounts may be washed out with plenty of water according to local and national waste management regulations. |

| SECTION 14: | TRANSPORT INFORMATION |
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| 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 chemical under Occupational Safety and Health (Classification, Labeling, and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

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

| SECTION 16: | OTHER INFORMATION |
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| Approvals | Research and Development Department Petron Corporation |

This safety data sheet contains the following revisions: **2**

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

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