HYPEX EP 4000

| SECTION 1: | IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY | |
|-----------------------------|--|--|
| Product Name | HYPEX EP 4000 | |
| Manufacturer | PETRON CORPORATION San Miguel Head Office Complex 40 San Miguel Avenue, Mandaluyong City PHILIPPINES | |
| Product Type | Petroleum Hydrocarbons with Additives | |
| Recommended Use | Industrial Gear Lubricant | |
| Telephone No. | (02) 8-884-9200 | |
| Website | www.petron.com | |
| SECTION 2: | HAZARDS IDENTIFICATION | |
| GHS CLASSIFICATION | Not Classified as Hazardous Substance | |
| GHS LABELING | | |
| Pictogram | No symbol | |
| Signal Word | No signal word | |
| Hazard Statement | No hazard statement | |
| Other Hazard Information: | | |
| Health Hazards | Not expected to be a health hazard when used under normal conditions. | |
| Physical / Chemical Hazards | No significant hazards. | |
| Environmental Hazards | Not classified as dangerous to the environment. | |

SECTION 3:

COMPOSITION/INFORMATION ON INGREDIENTS

| Composition | CAS Number | % Weight |
|----------------------------|-------------|-------------|
| Highly refined mineral oil | 64742-62-7 | 70.0 - 80.0 |
| Polyisobutylene | 9003-27-4 | 30.0 - 20.0 |
| Alkyl phosphate | Proprietary | < 1 |
| Long chain alkyl amine | Proprietary | < 1 |
| Long chain alkenyl amine | Proprietary | < 1 |

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, including shoes, and launder before reuse. | |
|---|---|--|
| Inhalation | This product has low vapor pressure and 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. | |
| 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. | |
| SECTION 5: | FIRE-FIGHTING MEASURES | |
| Flash Point, COC, °C | 240 | |
| 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 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 | |



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

The following are the exposure limits for the major components of this product (when mists/aerosol may occur).

| Components | CAS-No. | Source | Value |
|----------------------------|------------|---------------|---|
| Highly refined mineral oil | 64742-62-7 | ACGIH OSHA | 5 mg/m ³ 10 mg/m ³ (STEL) 5 mg/m ³ |
| Polyisobutylene | 9003-27-4 | Not available | - |

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. |
|-------------------------|---|
| Gloves Protection | Use chemical resistant gloves. |
| Eye Protection | Where contact may occur, wear safety glasses with side shields. |
| 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. |
| 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 |
| Kinematic Viscosity at 40°C, cSt | 4,598 |
| Kinematic Viscosity at 100°C, cS | t 136.5 |
| Density at 15°C, kg/L | 0.9201 |
| Flash Point, °C | 240 |
| рН | 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 | Not flammable | |
|--------------------------------|---|--|
| Partition Coefficient | No data | |
| Auto-ignition Temperature, C | No data | |
| Decomposition Temperature, C | No data | |
| Explosion limits | No data | |
| SECTION 10: | STABILITY AND REACTIVIT | Y |
| Stability | This product is stable under recommended storage and handling conditions. | |
| Incompatibility | Not available | |
| Polymerization | Not Applicable | |
| SECTION 11: | TOXICOLOGICAL INFORMA | TION |
| Acute Toxicity | | |
| Highly refined mineral oil | Oral, LD50 Dermal, LD50 Inhalation, LC50 | >5000 mg/kg >5000 mg/kg >5 mg/L |
| Polyisobutylene | Oral, LD50 Dermal, LD50 Inhalation, LC50 | >5 g/kg (rat) >3000 mg/kg (rabbit) 17.3 mg/L (rat) |
| Skin Corrosion/Irritation | Low order of toxicity. Frequent discomfort. | t or prolonged contact may cause mild skin |
| Serious Eye Damage/Irritation | Will cause eye discomfort; ma | y 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 | Not carcinogenic; Not classified under IARC, OSHA, ACGIH, NTP, EU CLP (DMSO extract <3%). | |
| 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 INFORMATIO | N |

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity

 Distillates (Petroleum), hydrotreated heavy paraffinic

 Fish (LC₅₀/96-hours)
 >5000 mg/L (Oncorhynchus)

 Crustaceans (EC₅₀/48-hours)
 1000 mg/L (Daphnia magna)



| Algae (EC ₅₀ /96-hours) | >1000 mg/L (Scenedesmus) | |
|--|--|--|
| Polyisobutylene Fish (LC ₅₀ /96-hours) | >5600000 µg/L (Oncorhynchus) | |
| 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 not 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. | |
| Local Legislation | Disposal should be in accordance with applicable regional, national and local laws and regulations. | |
| SECTION 14: | TRANSPORT INFORMATION | |
| Air | (ICAO/IATA). This product is not regulated for air transport. | |
| Land | This product is not regulated for road/rail transport. | |
| Sea | IMDG (Packaged Goods and BLCs). This product is not regulated for sea transport | |
| SECTION 15: | REGULATORY INFORMATION | |

Material is non-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 Substance (PICCS).

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

This safety data sheet contains the following revisions

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