Product Code: XXXX

EMERGENCY CALLS:

Technical Services Department
Telephone: (+966 12) 215 7000

MATERIAL SAFETY DATA SHEET

1- IDENTIFICATION

Product Name: PETROMIN TURBOMASTER SAE 15W-40

2- COMPOSITION

Additivated Lubricating Oil: A blend of severly hydrotreated heavy paraffenic distillate known as highly refined hydrofinished base oil with special additive additive package incorporated in small quantity containing; saturated hydrocarbons having carbon numbers C_{15} - C_{50} and special Polyolefin polyamine succimide, polyol; zinc zlkyl dithiophosphate; calcium branched chain alkyl phenate sulfide; polyalkyl arylamine; calcium long chain alkyl sulfonate; alkeonic acid ester, borated & Branched alkylphenol and calcium branched alkylphenol

3- HAZARDS

Human:

Inhalation - Short-term exposures to vapors and oil mists cause irritation of the respiratory tract. Long-term exposures can cause lung fibrosis preceded by broncho-pulmonary symptoms in concentrations over 5 mg/m³ (TLV).

Ingestion - Low oral toxicity: toxicity by ingestion: Grade O; LD 50 > 15g/Kg (oral-rat). Intestinal absorption is very low. Accidental intake of large amounts causes irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.

Contact/Skin - Low skin toxicity: LD 50 > 5g/Kg (rat), level considered to be harmless in short-term exposures. Long-term exposures produce smarting, redness, irritation and dermatitis due to defatting of the keratyn layer. No skin sensitization has been registered in animal tests or human cases.

Eyes - Repeated exposure to vapors or liquid cause irritation.

Environment:

Combustible. Lighter than water; it can obstruct sewers and water intakes.

4- FIRST-AID

Skin : Flush with plenty of soap and water

Eyes : Flush with plenty of water for at least 15 minutes.

Ingestion : Do not induce vomiting. If conscious, have the victim drink

Water or milk.

Inhalation : Remove the victim to fresh air; administer oxygen if

Necessary. Call for medical attention.

5- FIRE PRECAUTIONS

Extinguishing Media Suitable : Foams, dry chemicals, CO₂, nylons and powders

Non-suitable : Water, may be ineffective

Protection Equipment : Heat resistant suit and gloves. Self-contained breathing

apparatus.

Special Risks : NP

Special Measures : Not required

Combustion Products : CO₂, H₂O, CO (in defect of air), nitrogen, sulfur and phosphorus

Oxides

6- ACCIDENT PRECAUTIONS

Precautions for the Environment:

Hazard of physical fouling to coasts, soils, etc. due to low solubility and high viscosity of the oils. Avoid the material entering water intakes.

Clean-up Method:

Treat as an accidental oil spill or leak; avoid dispersion of the material with mechanical barriers. Remove with physical or chemical treatment.

Personal Precautions : Avoid prolonged contact with contaminated clothes or with the product

Personal Protection : Gloves and goggles or face shield

7- STORAGE AND HANDLING

Handling:

General Precautions : Avoid prolonged contact and inhalation of mists and vapors

From heated oils

Specific Conditions : Safety goggles and gloves should be used

Storage:

Storage Conditions : Containers properly labeled and sealed, placed in cool and

Well ventilated areas

Incompatible Materials : Strong oxidants

Dangerous Practices : NP

8- PERSONAL PROTECTION

Inhalation

Low vapor pressures: The product is slightly volatile at room temperature and does not present special risks. In presence of heated oils, wear protective masks to avoid vapor inhalation.

Skin : Gloves

Eye : Safety goggles

Other : Showers and eye-washers in the working area.

Specific Hygiene Measures : Good work practices to minimize exposure and adoption of good

Personal hygiene measures avoid the presence of skin rash and oil

Acne

Exposure Controls : TLV (typical base oil) = 0.016 PPM at 20°C (saturated vapor

Concentration); TLV/TWA (ACGIH) = 5mg/m³ (oil mist);

TLV/STEL (ACGIH) = 10mg/m3 (oil mist

9- PHYSICAL AND CHEMICAL PROPERTIES

Color : Brownish Oil Specific Gravity (at 15° C) : 0.894 (typical)

Flash Point : 220 °C Explosive Properties : NP Oxidizing Properties : NP

Water Solubility : Insoluble (100 PPM max. H₂O)

Solubility : Organic solvents
Vapor Density : 17.7 (air=1)
Viscosity at 100° C : 13.66 cSt (typical)
Pour Point : -45 °C (typical)

10- STABILITY AND REACTIVITY

Stability : Stable at room temperature

Polymerization Risk : NP

Materials to Avoid : Strong oxidants react with oils and organic materials

Hazardous Decomposition Products : NP

Condition to Avoid : Exposure to open flames

11- TOXICOLOGICAL INFORMATION

Routes of Exposure : Contact with skin, eyes and inhalation. Ingestion is not

Frequent.

Acute and chronic Effects : No malignant acute effects are known. Chronic effects due

To repeated exposures are irritation, dermatitis and acne.

Carcinogenicity : NP

Reproductive Toxicity : No evidences

Medical Conditions which Increase

Hazard to Exposure : Respiratory tract deficiencies and dermatological problems

12- ECOLOGICAL INFORMATION

Pollutant Potential:

Persistence and Degradability- the material is oily and viscous and floats on water. It presents a high physical fouling potential, mainly in sea-spills; by contact, destroys small acuatic organisms and makes living difficult for upper organisms, not allowing the sunlight to reach underlying marine ecosystems, affecting its normal development.

Mobility/Bioaccumulative Potential- it does not present bioaccumulative problems in living organisms or incidence in the tropic food chain, although it may cause long-term adverse effects in the acuatic environment, due to its high physical fouling potential.

Eco toxicological Effect:

Dangerous for acuatic life in high concentrations (spills).

13- DISPOSAL

Disposal Methods (surplus) : Recycling and recovery of base oils when possible

Disposal (waste) : Only in specific prepared and controlled areas. Avoid releasing

oils to sewers because they can destroy water treatment plant Microorganisms. Do not attempt to clean containers since residue is difficult to remove; dispose in a safe way.

Handling (waste) : Labeled and sealed containers. Avoid direct contact with waste

oils.

14- TRANSPORTATION

Special Precautions : Stable at room temperature and during transport. Store in

Cool well ventilated areas.

UN Number : Unregulated

Road (ADR)/ Rail (RID) /River (ADNR)

Airline (IATA-ACAO)

Marine (IMO-IMDG)

: Not Restricted for Transportation
: Not Restricted for Transportation
: Not Restricted for Transportation

15- REGULATORY INFORMATION

Regulation CERCLA/SARA - Section 302 Extremely Hazardous

Substances and TPQs (in pounds):

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health: No
Chronic Health: No
Fire Hazard: No
Pressure Hazard: No
Reactive Hazard: No

<u>CERCLA/SARA - Section 313 and 40 CFR 372:</u> This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

EPA (CERCLA) Reportable Quantity (in pounds):

This material does not contain any chemicals with CERCLA Reportable Quantities.

California Proposition 65:

This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

Canadian Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the Regulations.

WHMIS Hazard Class: None

National Chemical Inventories:

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA. All components are either on the DSL, or are exempt from DSL listing requirements.

U.S. Export Control Classification Number: EAR99

16- OTHER INFORMATION

Date of Issue: 15-Sep-2014

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Revised Sections or Basis for Revision: Section 3 & 5 revised & section 15 & 16 added

Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; IARC = International Agency for Research on Cancer; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

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