MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION AND COMPANY

Product Name VESTA HYDRAULIC OIL AW 22

Product Type Hydraulic oil.

Company PT. PACIFIC LUBRITAMA INDONESIA

Jl. Raya Bojonegara KM 6, Desa Bojonegar Serang

Banten – Indonesia. 42454

Tel: (62-254) 5750555 Fax: (62-254) 5750333

2. COMPOSITION

Mineral Oil Content 98.5 to 99.5%.

Additives Content 0.5-1.5%

3. HAZARDS IDENTIFICATION

Human Health

Hazards

Product is not hazardous.

Eye Contact Slightly irritant.

Skin Contact Prolonged or repeated contact may irritate skin.

Inhalation Repeated and prolonged over-exposure to oil mists may cause

irritation or discomfort.

Ingestion Minimal toxicity.

Safety Hazards Not classified as flammable but will burn.

Environmental

Hazards

Not readily biodegradable.

4. FIRST AID

Eye Contact Flush eyes with large amount of water until irritation subsides.

If irritation persists, get medical attention.

Skin Contact Flush with large amount of water; use soap if available.

Remove contaminated clothing. If irritation persists, get

medical attention.

Inhalation Remove to fresh air. If rapid recovery does not occur, get

medical attention.

Ingestion Do not induce vomiting. If rapid recovery does not occur, get

medical attention.

5. FIRE SAFETY

Flash Point >170°C.

Flammable Limits LEL 1.0.

UEL 6.0.

Autoignition Temp >220°C.

Specific Hazards Not classified as flammable but will burn. Hazardous

combustion

products may include carbon monoxide, oxides of sulphur, and

unidentified organic and inorganic compounds.

Fire Fighting Use dry chemical, foam or carbon dioxide to extinguish fire.

Water may cause splattering or frothing. Use water to cool and protect fire-exposed material. Wear protective equipment

during fire fighting.

6. ACCIDENTAL RELEASE MEASURES

Clean-up Procedure Stop the source of leak or release and contain spill if possible.

Cover spill with generous amount of inert absorbent material such as sand or earth. Sweep up and remove to suitable, clearly

marked containers for disposal in accordance with local

regulations. Scrub contaminated area with detergent and water. Pick up liquid with additional absorbent material and dispose as above. Wear proper protective equipment during clean-up.

7. HANDLING AND STORAGE

Handling Handling temperatures should not exceed 70°C. Wear proper

safety protective equipment. Wash hands thoroughly after handling. Water contamination and spillage should be avoided.

Storage Storage temperatures should be maintained between 0 to 50°C.

Odorous and toxic fumes may be evolved from decomposition

of product if stored above the safe temperature.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits Threshold Limit Values for oil mist is recommended to be

controlled at 5 mg/m³ or lower for exposure of 8 hours daily.

Ventilation Use exhaust ventilation to keep below exposure limits.

Eye Protection Wear safety glasses or face shields if splashing is likely to

occur.

Skin Protection Avoid repeated and prolonged contact with product. Use oil

resistant gloves.

Respiratory

Protection

Not normally required unless in confined space.

Body Protection Use proper protective equipment to avoid contact. Wear PVC

apron if splashes are likely to occur.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid.

Slightly Brownish. Colour

Characteristic mineral oil. Odour

<0.5 Pa at 20°C. Vapour Pressure 0.838 g/cm³ at 15°C Density

Kinematic Viscosity @ 40°C 22.4 cSt. Kinematic Viscosity @ 100°C 5.63 cSt. -45 °C. **Pour Point** >170 °C. Flash Point Not available. pH of undiluted product Auto-ignition temperature $>220^{\circ}$ C. Solubility in water Negligible.

10. STABILITY AND REACTIVITY

Stability Product is stable under normal use conditions.

Thermal Carbon monoxide, carbon dioxide, oxides of sulphur and nitrogen and organic and inorganic compound may evolve Decomposition

when subject to heat or combustion.

Hazardous Will not occur under normal conditions.

Polymerisation

Incompatible Strong oxidizing agents. Strong acids.

Materials

11. TOXICOLOGICAL INFORMATION

Basis No toxicological data is available for this product. Information

is provided based on the additives, other components and base

stock used.

Acute Exposure

- Oral

LD 50 expected to be above 2000 mg/kg.

Acute Exposure

- Skin

LD 50 expected to be above 2000 mg/kg.

Inhalation Repeated or prolonged exposure to oil mists may cause

irritation.

Eye Irritation Slightly irritant.

Skin Irritation Not a skin irritant unless repeated or prolonged contact.

Respiratory Irritation Slight irritant.

Carcinogenicity No data to suggest that product is carcinogenic.

Mutagenicity No data to suggest that product is mutagenic.

Other Information Brief contact with used oil is not expected to have serious

effect

in humans if the oil is removed thoroughly by washing with

soap and water.

Used engine oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they present risks to health and the environment on disposal. All used oils should be handled with

caution and skin contact should be avoided.

ECOLOGICAL INFORMATION 12.

Basis No ecological data is available for this product. Information is

provided based on the additives, other components and base

stock used.

Mobility Liquid under most environmental conditions. Floats on water.

It

is absorbed by soil and will not be mobile.

Persistence/ Not readily biodegradable. Major constituents are expected to Degradability be inherently biodegradable, but the product contains

components that may persist in the environment.

Bioaccumulation Has the potential to bioaccumulate.

Ecotoxicity Poor soluble mixture. Practically non-toxic to aquatic

organisms.

May cause physical fouling of aquatic organisms.

DISPOSAL CONSIDERATION

Product Disposal Used or waste oil should be recycled or disposed off in

conformity to local disposal regulations. Contact local

authorities for approved disposal contractor.

Container Disposal Empty drums should be completely drained and sent to a drum

reconditioner or properly disposed of. Non-reusable small

containers should be recycled or disposed of. Ensure

conformity to local disposal regulations.

14. TRANSPORT INFORMATION

General Information Not dangerous for conveyance under UN, IMO, ADR/RID and

IATA/ICAO codes.

15.	REGULATORY INFORMATION
	Not Applicable.
16.	OTHER INFORMATION

The above information is based on data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. Therefore, no warranty either expressed or implied of merchantability or fitness for particular purpose is made with respect to the product or the information contained herein.