

PETROVIETNAM EXPLORATION PRODUCTION CORPORATION PETROVIETNAM DOMESTIC EXPLORATION PRODUCTION OPERATING COMPANY LIMITED

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1. IDENTIFICATION

CHEMWATCH HAZARD RATING

Health Hazard	1
Flammability	2
Reactivity	0
Body Contact	1

Scale: Min/Nil = 0 Low = 1 Moderate = 2 High = 3 Extreme = 4

Product name	PVEP POC - Dai Hung Stabilized Crude Oil
Dangerous Goods Class	3
Hazchem	3
Poisons Schedule Number	None

USE

Source of petrol, fuel and lubricating oils, petroleum jelly, butane etc.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance

Viscous dark brown oily liquid with characteristic hydrocarbon odour; does not mix with water. Mixes with chloroform, ether and benzene.

2.752 cSt @ 50 deg.C
73
4.6
0.8451
- 17

CHEMICAL ENTITIES

Asphalthenes (% mass)	0.267
Mercury (Wt.ppb)	9.0
Nickel (Wt.ppm)	1.895
Vanadium	0.075
Total Nitrogen (%mass)	0.032
Pour point (deg.C)	21
Salt Content (mg/l)	8.2
Sulfur content (%)	0.075
Hydrogen sulfide (ppmw)	< 1

2. HEALTH HAZARD INFORMATION

HEALTH EFFECTS

SWALLOWED

The liquid is highly irritating and toxic if swallowed. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis. Considered an unlikely route of entry in commercial / industrial environment.

EYE

The liquid is highly irritating to the eyes and is capable of causing temporary discomfort with mild redness of the conjunctiva (similar to wind-burn), temporary impairment of vision or other transient eye damage/ulceration. The vapour is mildly irritating to the eyes.

SKIN

Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following

Toxic effects may result from skin absorption

Exposure limits with skin notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for inhalation.

A few individuals may show allergic / sensitization responses which may be minor to severe. Exposure will aggravate this pre-existing condition and those with sensitization reactions should not be required to work where exposure may occur.

The material may accentuate any pre-existing skin condition.

INHALED

The vapour is irritating to the upper respiratory tract. Inhalation hazard is increased at higher temperatures. Acute effect from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterized by headache and dizziness, excitation, euphoria, blurred vision and increased reaction time, fatigue and loss of co-ordination.

If exposure to highly concentrated atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and death.

Inhalation of high concentration of dense oil mists may results in oil pneumonia.

CHRONIC

Principal routes of exposure are usually by skin contact /absorption and inhalation of vapour. The material may release toxic hydrogen sulfide vapour. Inhalation at low concentrations causes headache, dizziness and upset stomach. Higher concentrations cause olfactory fatigue, irritation to the respiratory tract, excitement, confusion.

FIRST AID

SWALLOWED

If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, do NOT induce vomiting. Give a glass of water.

EYE

If this product comes in contact with the eyes:

Immediately hold the eyes open and wash with fresh running water.

Ensure irritation under the eyelids by occasionally lifting upper and lower

lids. If pain persists or recurs seek medical attention.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If product comes in contact with the skin:

Immediately remove all contaminated clothing, including footwear (after rinsing with water) Wash affected areas thoroughly with water (and soap if available). Seek medical attention in event of irritation.

INHALED

If fumes or combustion products are inhaled: Remove to fresh air.

Lay patient down. Keep warm and rested.

If breathing is shallow or has stopped, ensure clear air way and apply resuscitation. Transport to hospital or doctor.

3. PRECAUTION TO USE

ENGINEERING CONTROLS

Use in a well-ventilated area

Non required when handling small quantities

Otherwise: Local exhaust ventilation usually required

If risk of overexposure exists, wear SAA approved respirator

Provide adequate ventilation in warehouse or closed area.

PERSONEL PROTECTION

EYE

Use Safety glasses with side shields or as required, chemical goggles. Contact lenses pose a special hazard, soft lenses may absorb irritant and all lenses concentrate them.

HANDS/FEET Oil resistant gloves Wear chemical protective gloves Wear safety footwear. FLAMMABILITY

4. SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

SUITABLE CONTAINER Bulk containers only

STORAGE INCOMPATIBIT Avoid storage with oxidizers

STORAGE REQUIREMENT

Store in original containers in approved flammable liquid storage area.

DO NOT store in pits, depressions, basement or area where vapour may be trapped.

No smoking, naked lights, heat or ignition sources.

Keep containers securely sealed.

Store away from incompatible materials in a cool, dry, well-ventilated area.

Protect containers against physical damage and check regularly for leaks.

Observe manufacture's storing and handling recommendations.

TRANSPORTATION

- Class 3 Flammable liquid shall not be leaded in the same vehicle or packed in the same freight containers with
- Class 1 Explosives.
- Class 2.1 Flammable gases
- Class 2.3 Poisonous gases
- Class 4.2 Spontaneously combustible substances
- Class 5.1 Oxidising agents
- Class 5.2 Organic peroxides
- Class 7 Radioactive substance

SPILL AND DISPOSAL

MINOR SPILL

Remove all ignition sources Clean up all spills immediately. Avoid breathing vapour and contact with skin and eyes Control personal contact by using protective equipment

MAJOR SPILL

Environmental hazard - contain spillage Clear area of personnel and move upwind Alert fire brigade No smoking, naked lights or ignition sources. Increase ventilation Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosive proof equipment Collect recoverable product into labeled containers for recycling. Absorb remaining product with sand, earth or vermiculite Collect solid residues and seal in labeled drums for disposal

DISPOSAL

Consult manufacture for recycling options and recycle where possible Incinerate residue at an approved site Recycle containers where possible, or dispose of in an authorized landfill

FIRE/EXPLOSION HAZARD

Liquid and vapour area flammable Moderate fire hazard when exposed to heat or flame

Vapour forms and explosive mixture with air

Moderate explosion hazard when exposed to heat or flame.

Vapour may travel a considerable distance to source of ignition

Heating may cause expansion or decomposition leading to violent rupture of containers On combustion, may emit toxic fumes of carbon monoxide

Other combustion products include carbon dioxide, sulfur oxides and hydrogen sulfide.