THAI PETROLEUM AND TRADING CO., LTD.

SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

PRODUCT DETAILS:

TRADE NAME:

PULZAR ADVANCE EP GEAR
SAE 80w-90, 85W-140

CAS NUMBER:

Not applicable for mixtures.

SYNNONYMS: None

MANUFACTUER'S NAME: THAI PETROLEUM & TRADING CO., LTD.

ADDRESS:

9-10TH Floor TP&T Tower, 1 Soi Vibhavadee-Rangsit 19

Vibhavadee-Rangsit Rd., Chatuchak, Chatuchak,

Bangkok 10900

Telephone: (662) 9361801-30

Fax: (662) 9361860

EMERGENCY CONTACT: (662) 9361801-30 (THAI PETROLEUM & TRADING CO., LTD)

EFFECTIVE DATE: August 26, 2019

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Flammable liquids: Not Classified

Acute toxicity

Oral: Not Classified
Dermal: Not Classified
Inhalation(Vapor): Not Classified
Skin corrosion/Irritation: Not Classified
Eye damage/eye irritation: Not Classified

Sensitization:

Respiratory: Not Classified Skin: Category 1
Germ cell mutagenicity: Not Classified Carcinogenicity: Not Classified Toxic to reproduction: Not Classified

Hazardous to the aquatic environment

Acute hazard:

Long-term hazard:

Hazardous to the Ozone layer:

Not Classified

Not Classified

Not Classified

2.2 Label elements



Signal Word: Warning

Hazard Phrase:

 ${
m H317}$: May cause an allergic skin reaction

 $Precautionary\ Statement:$

Prevention Phrase:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

P272: Contaminated work clothing should not be allowed out of the workplace

P280 : Wear protective gloves

Response Phrase:

P302 + P352 : IF ON SKIN : Wash with plenty of soap and water

P333 + P313 : If skin irritation or rash occurs : Get medical advice/attention

P321: Specific treatment (see first aid statements on this label).

P363: Wash contaminated clothing before reuse

Storage:
Disposal:

P501: Dispose of contents/container to local/regional/national/international regulations.

3. COMPOSITIONS/INFORMATION ON INGREDIENTS

Description: Highly refined mineral oil (IP 346 DMSO extract <3%). Proprietary performance additives. This product does not contain any hazardous ingredients at or above regulated thresholds.

COMPONENT	CAS NO.	WEIGHT PERCENT RANGE
Diatillates(petroleum) Hydrotreated heavy paraffini	64742-54-7 64742-01-4	90 – 95
Additive Package	Proprietary	5 – 10

4. FIRST AID MEASURES

EYE CONTACT: Check for and remove any contact lenses. Rinse immediately with water for at least 15

minutes or until irritation subsides. In case of eye irritation or material is hot, treat burns

and get medical attention.

SKIN CONTACT: Wash contaminated area with plenty of soap and water. Do not use organic solvents. If

redness or irritation occurs, seek medical attention. If material is hot, submerge injured

area in cold water. If victim is severely burned, remove to a hospital immediately.

INHALATION: This material has a low vapor pressure and is not expected to present an inhalation

exposure at ambient conditions. If vapor or mist is generated when the material is heated

or handled, removed victim form exposure.

INGESTION: Do not induce vomiting. Immediately give two glasses of water, a little at a time. Never give

anything by mouth to an unconscious person. Call a physician.

5. FIRE-FIGHTING MEASURES

FLASH POINT (ASTM D-92): > 240 °C (Base Oil) Classified as Class IIIB by NFPA

EXTINGUISHING MEDIA: Water spray; carbon dioxide; alcohol resistant foam; dry powder.

SPECIAL FIRE FIGHTING PROCEDURES:

Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

UNUSUAL FIRE AND EXPLOSIVE CONDITION:

Dense smoke may be generated while burning, carbon monoxide, carbon dioxide and other oxide may be generated as products of combustion.

PROTECTIVE EQUIPMENT FOR FIRE MEN:

Use full protective clothing for chemicals and a self-contained breathing apparatus.

OTHER: No information available

6. ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS:

Wear protective equipment. Keep unprotected persons away.

ENVIRONMENTAL PROTECTION:

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewage/surface or ground water.

MEASURES FOR CLEANING/COLLECTING:

All disposals must comply with federal, states, and local regulations. The material, if spilled or discarded, may be a regulated waste. Refer to states and local regulations. CAUTION! If regulated solvents are used to clean up spilled material, the resulting waste mixture may be regulated. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

7. HANDLING AND STORAGE

HANDLING PROCEDURES:

Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product.

RECOMMENED HANDLING TEMPERATURE:

< 45 °C

STORAGE PROCEDURES:

Take precautions to avoid release to the environment. Keep container dry. Store in closed containers away form heat, sparks, open flame, or oxidizing materials. Do not transfer to unmarked containers. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.Do not eat, drink or smoke at the workplace

RECOMMENED STORAGE TEMPERATURE:

< 45 °C

RECOMMENEDATION: Storage should not be stored over 3 years.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS VALUE: No information available

PERSONAL PROTECTIVE EQUIPMENT:

- GENERAL PROTECTIVE AND HYGINIC MEASURES:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hand before breaks and at the end of work. Avoid contact with the eyes and skin.

- RESPIRATORY PROTECTION :

Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

- EYE PROTECTION:

Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed in to eyes, wear plastic face shield or splash-proof safety goggles.

- SKIN PROTECTION:

No skin protection is not required for single, short duration exposures. For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc.) over parts of the body subject to exposure. If handling hot material, use insulated protective clothing

(boots, gloves, aprons, etc.). Launder soiled clothes. Properly dispose of contaminated

leather articles including shoes, which cannot be decontaminated.

VENTILATION: If vapor or mist is generated when the material is heated or handled, adequate ventilation

in accordance with good engineering practice must be provided to maintain concentrations

below the specified exposure or flammable limits.

VIRONMENTAL EXPOSURE CONTROLS:

No special controls are needed

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Brown
Odor: mild

Flash Point °C): 220 (80w-90), 240 (85W-140) Kinematic Viscosity @100 °C 15.28 (80w-90), 28.50 (85W-140)

Pour Point, oC NA Upper Flammable Limit: NA Lower Flammable Limit: NA **Auto-ignition Point:** NA Water Solubility: NE Percent Solid: NE Percent Volatile: NA **Volatile Organic Compound:** NA Vapor Density: NA

Evaporation Rate:

NA = Not Applicable, NE = Not Established

For furture technical information, Contact your marketing representative.

NA

10. STABILITY AND REACTIVITY

STABILITY: The product is stable.

DANGEROUS REACTIONS: No dangerous reactions known

CONDITIONS TO AVOID: Static discharges.

MATERIALS TO AVOID: Strong acids, strong bases and strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Normally stable

Thermal decomposition or burning may release oxides of carbon and other toxic

gases or vapors.

11. TOXICOLOGICAL INFORMATION

Eye: No significant health hazards identified.

Skin: May cause an allergic skin reaction.

Inhalation: No significant health hazards identified.

Ingestion: No significant health hazards identified.

Mutagenic effects: No known significant effects or critical hazards.

Carcinogenicity: No component of this product at level greater than or equal to 0.1% is identified as a

carcinogen by ACGIH, the International Agency for Research on Cancer (IARC), the European Commission (EC), or the National Occupational Health and Safety Commission.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No testing has been performed by the manufacturer.

Persistence and degradability: No testing has been performed by the manufacturer.

Mobility: No testing has been performed by the manufacturer.

Bioaccumulative potential: This product is not expected to bioaccumulate through food chains in the environment.

Other ecological information: This product is unlikely to disperse in water

Page 4 of 6

13. DISPOSAL INFORMATION

REGULATORY INFORMATION: Dispose of residual products and empty containers responsibility. Caution! If regulated

> solvents used to clean up spilled material, the resulting waste mixture may be regulated. Department of Transportation (DOT) regulations may apply for transporting this material

when spill. Refer to state and local regulations.

WASTE DISPOSAL METHOD: Waste material may be land filled or incinerated at an approved

facility. Materials should be recycled if possible.

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

Shipping Name: Not Regulated

Hazard Class: UN/NA#:

None Packing Group: Not classified as dangerous for transport.

Required Label (s): None Addition Info.: None

INTERNATIONAL TRANSPORTATION REGULATIONS: Not regulated as dangerous goods.

15. REGULATORY INFORMATION

INTERNATIONAL INVENTORY STATUS

US FEDERAL REGULATION

TSCA Chemical Inventory: All components of this material are on the US TSCA Inventory SARA:

None of this products components are listed under Section 302

or Section 313

CANADA REGULATION

DSL Chemical Inventory: All components of this material are on the DSL Inventory

AUSTRALIA REGULATION

AICS Chemical Inventory: All components of this material are on the AICS Inventory

PHILIPPINES REGULATION

PICCS Chemical Inventory: All components of this material are on the PICCS Inventory

KOREA REGULATION

ECL Chemical Inventory: All components of this material are on the ECL Inventory

JAPAN REGULATION

METI/ENCS Chemical Inventory: All components of this material are on the METI/ENCS Inventory

CHINA REGULATION

IECS Chemical Inventory: All components of this material are on the IECS Inventory

THAILAND REGULATION: All components of this material are not subjected to Hazardous Substance

Act B.E. 2535

16. OTHER INFORMATION

HEALTH AND ENVIRONMENTAL LABEL LANGUAGE

CAUTION: Contains Petroleum oil (Grease). Repeated skin contact may cause skin

disorders.

ATTENTION: Repeated exposure to oil mist in excess of OSHA limit (5 mg/m3) can result in

accumulation of oil droplets in pulmonary tissue.

PRECAUTIONARY MEASURES: Avoid excessive & prolonged skin contact. Wash thoroughly

after handling Avoid generation and inhalation of oil mists.

INSTRUCTION IN CASE OF FIRE OR SPILL:

In case of fire, use water spray, foam, dry chemical or carbon dioxide. Water spray may be

ineffective, but can be to cool containers. In

case of spill, do not use water, soak up with absorbent material.

DISCLAIMER OF WARRANTY:

The information contained herein is based upon data and information available to us, and reflects our best professional judgement. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Thai Petroleum & Trading Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent. Since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. 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 use.