

**SAFETY DATA SHEET****1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****PRODUCT DETAILS:**

TRADE NAME: PULZAR LONG LIFE Z-7
API CF-4/SG, SAE 15W-40, SAE 20W-50
CAS NUMBER: Not applicable for mixtures.
SYNONYMS: None

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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 : | Category 3 |
| Eye damage/eye irritation: | Not Classified |
| Sensitization : | |
| Respiratory: | Not Classified |
| Skin: | Not Classified |
| Germ cell mutagenicity: | Not Classified |
| Carcinogenicity: | Not Classified |
| Toxic to reproduction: | |
| Specific target organ toxicity (Single exposure) : | Classification not possible |
| Specific target organ toxicity (Repeated exposure): | Classification not possible |
| Hazardous to the aquatic environment | |
| Acute hazard : | Not Classified |
| Long-term hazard : | Not Classified |
| Hazardous to the Ozone layer : | Not Classified |

2.2 Label elements

Signal Word : Warning

Hazard Phrase :
H316 : Causes mild skin irritation

Precautionary Statement :

Prevention Phrase :

Response Phrase :
P332 + P313 : If skin irritation occurs: Get medical advice/attention

Storage :

Disposal :

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 |
|---------------------------|-------------|----------------------|
| Severely Treated Base Oil | - | 80 - 90 |
| Additive Package | Proprietary | 10 - 20 |

4. FIRST AID MEASURES

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|----------------------|--|
| 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 from 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

| | |
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| FLASH POINT (ASTM D-92): | > 230 °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.

RECOMMENDED HANDLING TEMPERATURE :

< 45 °C

STORAGE PROCEDURES :

Take precautions to avoid release to the environment. Keep container dry. Store in closed containers away from 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

RECOMMENDED STORAGE TEMPERATURE :

< 45 °C

RECOMMENDATION :

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): | 238 (SAE 15W-40), 247 (SAE 20W-50) |
| Kinematic Viscosity @100 °C | 15.15 (SAE 15W-40), 19.63 (SAE 20W-50) |
| Pour Point, °C | -27 (SAE 15W-40), -27 (SAE 20W-50) |
| 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 |

NA = Not Applicable, NE = Not Established

For future technical information, Contact your marketing representative.

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. |
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11. TOXICOLOGICAL INFORMATION

Acute toxicity :

| Chemical Name | CAS no. | Oral rat LD ₅₀ | Dermal Rabbit LD ₅₀ | Inhalation rat LC ₅₀ |
|---------------------------|-------------|-----------------------------|--------------------------------|---------------------------------|
| Severely Treated Base Oil | - | >5000 mg/kg | >5000 mg/kg | > 5 mg/l |
| Additive Package | Proprietary | >10000 mg/kg >2000 mg/kg | >2000 mg/kg >2000 mg/kg | - - |

| | |
|---|--|
| Skin corrosion/irritation : | Causes mild skin irritation |
| Serious eye damage/irritation : | Not classified |
| Skin sensitization : | Not classified |
| Germ cell mutagenicity : | Not classified |
| Carcinogenicity : | Suspected of damaging fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard) |
| Reproductive toxicity : | Not classified |
| Specific target organ toxicity : (single exposure) | Not classified |
| Specific target organ toxicity : (repeated exposure) | Not classified |
| Aspiration hazard : | Not classified |

12. ECOLOGICAL INFORMATION

Acute toxicity :

| Chemical Name | CAS no. | L(E)C50 (mg/L) Algae 72 or 96 hr. | L(E) C50 (mg/L) Crustaceae or Invertebrate 48 hr. | L(E) C50 (mg/L) Fish 96 hr. |
|----------------------------|-------------|--------------------------------------|--|--------------------------------|
| Severerly Treated Base Oil | - | - | - | >5000 mg/L |
| Additive Package | Proprietary | - | - | 10-100 mg/L >1000 mg/L |

Mixture acute toxicity : Not classified

Chronic toxicity :

| Chemical Name | CAS no. | NOEC | Degradation | BCF | Log POW |
|----------------------------|-------------|------|-------------|-----|---------|
| Severerly Treated Base Oil | - | - | <60% | - | >3.5 |
| Additive Package | Proprietary | - | - | - | - |

Mixture chronic toxicity : Not classified

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.