Safety Data Sheet

No: L092

CPC Marilube Oil CO 250 \ CO400 \ C0700 \ C0700 Plus \ C01000 Ver. 4.2

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL Product Name: CPC Marilube Oil CO 250 \ CO400 \ CO700 \ CO700 Plus \ CO1000

OTHER CHEMICAL Product Name: : --

Product Code: LB54260 (C0250) \ LB54410 (C0400) \ \ LB54700 (C0700) \ \ LB54710

(CO700Plus) \ LB54990 (CO1000)

Manufacturer Name: Chinese Petroleum Corporation Lubricants Business Division.

Address:

6F, 15, Cheng-Kung 2nd RD, Chen-Zerng District, Kaohsiung, 806, Taiwan, R.O.C.

Telephone Number: 886-7-5361510

Emergency Telephone Number: 886-5-2224171 Ext. 7250 Fax Number: 886-5-2232062

II. COMPOSITION, INFORMATION ON INGREDIENT

1. CHEMICAL Product Identification:

Chemical Family: Petroleum Hydrocarbons

Chemical Formula: Mixture

Trade Name/Synonym: Not assigned

2. Component:

Ingredients CAS Number % by vol.

Heavy Paraffinic Distillate 64742-54-7 $70 \sim 90$ Diesel Engine Oil Additive Not assigned $10 \sim 30$

III. HAZARDS IDENTIFICATION

The Most Important Hazardous Effects:

1. Adverse Human Health Effects:

(For Long Term Exposure)

- Inhalation: no information on significant adverse effects.
- Skin Contact: skin disorders.
- Eye Contact: moderate to strong irritation.
- Ingestion: no information is available.
- 2. Environmental Effects: no information is available.
- 3. Physical and Chemical Hazards: Mist or vapors can produce at elevated temperatures.
- **4. Specific Hazards:** no information on significant adverse effects.

Main Symptoms:

- Inhalation: no information on significant adverse effects.
- Skin Contact: skin disorders.
- Eve Contact: irritation.
- Ingestion: aspiration hazard, digestive disorders.

NFPA Ratings (Scale 0-4): Health=1 Fire=1Reactivity=0

IV. FIRST AID MEASURE

Emergency Procedures:

• Inhalation:

Remove personnel from exposure area to fresh air immediately. If breathing is difficult, giveoxygen. Ifbreathingceases, use a oxygen rescuer or similar device to perform artificial respiration. Get medical attention immediately.

• Skin Contact:

Remove contaminated clothing, jewelry and shoes immediately. Wash with soap or mild detergent and largeamounts of water until noevidence of chemical remains (at least $15\sim20$ minutes). If irritation or adverse symptoms develop, seek medical attention.

• Eye Contact:

Flush eyes immediately with running water for at least fifteenminutes,occasionally lifting upper and lower lids, until noevidence of chemicalremains. Get medicalattention immediately.

• Digestion:

If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention.

Protection of First-aider: no information is available.

Notes to Physician: no information is available.

V. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: regular dry chemical, carbon dioxide, water, regular foam.

Large fires: Use regular foam or flood with fine water spray.

Specific Hazards: Smoke, carbon monoxide, adehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will formed: carbon, nitrogen, sulfur, calcium, zinc.

Special Fire Fighting Procedures:

- 1. Firefighters should wear proper protective equipment stay upwind.
- 2. Move container from fire area and shut off source if it can be done without risk.
- 3. Cool containers with water spray until well after the fire is out.
- 4. Do not scatter spilled material with high-pressure water streams.
- 5. Keep unnecessary people away, isolate hazard area and deny entry.
- 6. Avoid inhalation of material or combustion by-products.

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

- 1. Avoid heat, flames, sparks and other sources of ignition.
- 2. Stop leak if possible without personal risk.
- 3. Reduce vapors with water spray.

Environmental Precautions:

- 1. Eliminate all open flame in vicinity of spill or released vapor.
- 2. Stop the source of the leak or release.
- 3. Clean up releases as soon as possible.
- 4. Contain liquid to prevent further contamination of soil, surface wateror groundwater.

Methods for Cleaning Up:

- 1. Clean up small spills using sand or other non-combustible material.
- 2. Collect spilled material in appropriate container for disposal.
- 3. Wherefeasible and appropriate, remove contaminated soil.
- 4. Follow prescribed procedures for reporting and responding to larger releases.

VII. HANDLING AND STORAGE

Handling:

- 1. Wear protective equipment, if exposure conditions warrant.
- 2. Wash thoroughly after handling.
- 3. Use with adequate ventilation.
- 4. Handle in accordance with all current regulations and standards.
- 5. Handling temperature should not exceed 80 °C.

Storage:

- 1. Keep away from heat, sparks and flames.
- 2. Store in well-ventilated area.
- 3. Store in a tightly closed container.
- 4. Store in a cool, dry place.
- 5. Bond and ground during transfer.
- 6. Keep separated from incompatible substances.
- 7. Storage in accordance with all current regulations and standards.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Control:

Provide local exhaust ventilation system. Ensure compliance withapplicable exposure limits.

Control Parameter:

| HAZARDOUS MATERIAL | TWA | STEL | CEILING |
|-----------------------|---|---|---------|
| Mineral Oil Mist | ACGIH: 5 mg/m ³ NIOSH: 5 mg/m ³ OSHA: 5 mg/m ³ | NIOSH: 10mg/m ³ UK OES: 10mg/m ³ | |

Personal Protection Equipment:

• Respiratory Protection:

Not generally required unless needed to preventrespiratory irritation. In case of spill or leak resulting inunknown concentration, use NOISH approved supplied airrespirator.

• Hand Protection:

Wear appropriate chemical resistant gloves.

• Eye Protection:

Wear splash resistant safety gogglesorface shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

• Skin and Body Protection:

Wear appropriate chemical resistant clothing. Remove any chemical soaked clothing immediately.

IX. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: liquid | Form: brown viscous liquid | |
|------------------------------------|--------------------------------|--|
| Color: brown | Odor: mild odor | |
| PH: Not available | Boiling Range: No data | |
| Decomposition Temperature: No data | Flash Point: C0250 | |
| Autoignition Temperature: No data | Flammable Limits: Notavailable | |
| Vapor Pressure: Not available | Vapor Density: Notavailable | |
| Specific Gravity: 0.89 @ 60°F | Solubility: insoluble in water | |

X. STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and pressure.

Possible Hazardous Reactions: Will not polymerize.

Conditions to Avoid:

Avoid heat, flames, spark and other sources of ignition. Avoid contact within compatible material.

Materials to Avoid: strong oxidizing agents.

Hazardous Decomposition Products: Smoke, carbon monoxide, adehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will formed: carbon, nitrogen, sulfur, calcium, zinc.

XI. TOXICOLOGICAL INFORMATION

Acute Toxicity:

• Inhalation:

Heavy Paraffinic Distillate: Mists or sprays of insoluble oils are not harmful to the respiratory tract, although worker discomfort may occur at oil mist level of 5 mg/m³.

• Skin Contact:

Heavy Paraffinic Distillate: May cause hair follicules, comedomes, perifollicular papules and pustules. Some individuals may develop a skin sensitivity to petroleum products. Diesel Engine Oil Additive: May cause dermatitis. Symptoms may include redness, edema, drying, defatting and cracking of skin.

• Eye Contact:

Heavy Paraffinic Distillate: Found to be moderately irritating to rabbit eyes. Diesel Engine Oil Additive: Moderate to strong eye irritant.

• Ingestion:

Heavy Paraffinic Distillate: Mineral oils may cause gastrointestinal disturbance such as diarrhea.

Diesel Engine Oil Additive : LD_{50} : > 5000 mg / kg / rats-oral.

Local Effect: No data available.

Sensitization: No data available.

Chronic Toxicity:

• Inhalation:

Heavy Paraffinic Distillate: Repeated or prolonged contact with oils may cause fibrotic nodules, lipoid pneumonia, and lipid granuloma.

• Skin Contact:

Heavy Paraffinic Distillate: Repeated or prolonged contact may cause defatting of the skin

which may result in dermatitis and effect as detailed in acute exposure.

Diesel Engine Oil Additive: Repeated or prolonged skin contact with material may cause dermatitis.

• Eye Contact:

Heavy Paraffinic Distillate: Repeated or prolonged contact with irritants may cause conjunctivitis.

• Ingestion: No data available.

Specific Effects: No data available.

XII. ECOLOGICAL INFORMATION

Environmental Toxicity: Diesel Engine Oil Additive: based on component data.

Freshwater Fish Toxicity: LC50: >100 ppm

Freshwater Invertebrates Toxicity: LC₅₀: 10 - 100 ppm

Algal Inhibition : EC_{50} : > 1000 ppm

Saltwater Invertebrates Toxicity: LC₅₀: 10-100 ppm

XIII. DISPOSAL CONSIDERATIONS

Subject to disposal regulations:

Dispose in accordance with all applicable regulations.

XIV. TRANSPORT INFORMATION

No classification assigned.

XV. REGULATORY INFORMATION

Suitable Regulations:

1. U.S. Regulations:

TSCA Inventory Status: Y

SARA Hazard Categories, SARA Sections 311/312(40 CFR 370.21):

Acute: N
Chronic: N
Fire: N
Reactive: N

OSHA Process Safety(29 CFR 1910.119): N

2. State Regulations:

California Proposition 65: N

3. European Regulations:

EC Number: Not assigned

XVI. OTHER INFORMATION

| Reference Literatures | 1. OHS 15037 2. Additive SDS | | |
|-----------------------|---|--------------|--|
| | CPC Corporation Taiwan Lubricants Business Division | | |
| Made By | OHS Manager | FONG-WU CHEN | |
| Creation Date | NAY.08, 2018 | | |

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