

1 Tuas West Street, Singapore 637444 Tel (65) 6571 6237 Fax (65) 6897 7562 RCB No 199203169H

> SDS No. CI4 / E / A Revision Date: 14/12/12

# SAFETY DATA SHEET

# 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Mitsubishi Forklift Gold SAE GRADE : 15W/40, 15W/50, 20W/50

API GRADE : CI-4 RECOMMENDED USE : Engine Oil

**RESTRICTIONS ON USE** : This product should not be used for any other purpose than that recommended without

expert advice.

COMPANY IDENTIFICATION: Mitsubishi Caterpillar Forklift Asia Pte Ltd

1, Tuas West Street Singapore 637444

Tel: (65) 6571 6237 Fax: (65) 6897 7562

E-mail: inquiry.mit@mcfs.sg

**EMERGENCY TELEPHONE** : (65) 6321 4103 (Singapore 24 Hour Health Emergency)

1800 286 5555 (Singapore Chemical Incident In-Place Protection)

### 2. HAZARDS IDENTIFICATION

This product is considered to be hazardous according to regulatory guidelines.

HAZARD CLASSIFICATIONS: Eye damage/irritation Category 2B.

Hazardous to the aquatic environment - Chronic hazard Category 3.

**SIGNAL WORDS**: Warning.

**HAZARD STATEMENTS**: Causes eye irritation.

Harmful to aquatic life with long lasting effects.

SYMBOLS: None.

OTHER HAZARDS: None.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS: Petroleum hydrocarbon and additives. HAZARDOUS INGREDIENTS: No reportable hazardous or complex substances.

# 4. FIRST AID MEASURES

**INHALATION**: Call a POISON CENTRE or doctor/physician if the victim feels unwell. Do not use mouth-to-mouth resuscitation if exposure to hydrogen sulfide is suspected.

**SKIN CONTACT**: If irritation occurs, get medical attention.

**EYE CONTACT**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical attention.

INGESTION: Call a POISON CENTRE or doctor/physician if the victim feels unwell.

Page 1 of 5 CI4/E/A



1 Tuas West Street, Singapore 637444 Tel (65) 6571 6237 Fax (65) 6897 7562 RCB No 199203169H

#### 5. FIRE FIGHTING MEASURES

#### **EXTINGUISING MEDIA:**

- Appropriate Extinguishing Media: Water fog, foam, dry powder or carbon dioxide.
- **Inappropriate Extinguishing Media**: Straight stream of water.

#### FIRE FIGHTING:

- **Fire Fighting Instructions**: Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.
- **Hazardous Combustion Products**: Smoke, fume, aldehydes, oxides of carbon, sulfur oxides, nitrogen oxides, metal oxides, hydrogen sulfide, mercaptans, phosphorous oxides, incomplete combustion products.

### 6. ACCIDENTAL RELEASE MEASURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### **PROTECTIVE MEASURES:**

- Avoid contact with spilled material.
- Do not touch or walk through spilled material.
- Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders. (Refer Section 8)

### **SPILL MANAGEMENT:**

- Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.
- Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Notify port or relevant authority and keep public away. Remove from surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material. However, geographic conditions, wind, temperature, wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted.

# **ENVIRONMENTAL PRECAUTION:**

- Small Spill: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
- Large Spill: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

# 7. HANDLING AND STORAGE

**HANDLING**: Wash hands thoroughly after handling. Avoid release to the environment. This product contains zinc dialkylthiophosphate (ZDDP). It is temperature sensitive, do not reheat above the recommended temperature. This product is a static accumulator.

**STORAGE**: Store in accordance with applicable laws and regulations and material.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT: ACGIH TLV/TWA ACGIH STEL OSHA PEL Oil mist, refined mineral 5mg/m3 10mg/m3 5mg/m3

**ENGINEERING CONTROLS**: No special requirements under ordinary conditions of use and with adequate ventilation.

Page 2 of 5



1 Tuas West Street, Singapore 637444 Tel (65) 6571 6237 Fax (65) 6897 7562 RCB No 199203169H

**PERSONAL PROTECTION**: The use and choice of Personal Protection Equipment is related to the hazard of the product, the workplace, and the way the product is handled.

- Eve protection: If contact is likely, safety glasses with side shields are recommended.
- **Skin and Body Protection**: No skin protection is required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
- Hand Protection: No special requirements under ordinary conditions of use and with adequate ventilation.
- Respiratory Protection: No special requirements under ordinary conditions of use and with adequate ventilation.
- Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOUR: Max. 3.5

ODOUR: Marketable

ODOUR THRESHOLD: N/D

PH: N/A

MELTING POINT/FREEZING POINT: N/D

POUR POINT: Max. -25°C (-13°F)

BOILING POINT / RANGE : N/D

FLASH POINT [METHOD]: Min. 210°C (410°F) [ASTM D92]

EVAPORATION RATE: N/D
FLAMMABILITY: N/D
FLAMMABLE LIMITS (approximate volume % in air): N/D
VAPOUR PRESSURE: N/D
VAPOUR DENSITY (air = 1): N/D

SPECIFIC GRAVITY (water = 1.0): Approximately 0.90 at 15°C

SOLUBILITY IN WATER:
PARTITION COEFFICIENT (n-octanol/water):
N/D
AUTOIGNITION TEMPERATURE:
N/D
DECOMSPOSITION TEMPERATURE:
N/D
VISCOSITY:
N/D

# 10. STABILITY AND REACTIVITY

**REACTIVITY**: No reactivity hazards are known for the product.

CHEMICAL STABILITY: Product is stable under normal conditions.

POSIBILITY OF HAZARDOUS REACTIONS: No known hazardous reactions.

**CONDITIONS TO AVOID**: Elevated temperature, sources of ignition.

**INCOMPATIBLE MATERIALS**: Strong oxidizing agents, water.

**HAZARDOUS DECOMPOSITION PRODUCTS**: Product does not decompose at ambient temperatures.

Page 3 of 5



1 Tuas West Street, Singapore 637444 Tel (65) 6571 6237 Fax (65) 6897 7562 RCB No 199203169H

### 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:** Minimally toxic.

SKIN CORROSION / IRRITATION: May cause skin irritation.

SERIOUS EYE DAMAGE / IRRITATION : Irritating to eyes.

**RESPIRATORY OR SKIN SENSITIZATION**: If this product is over-heated especially in the presence of water, hydrogen sulfide may be released, causes respiratory collapse, coma and even death without any odor being sensed.

GERM CELL MUTAGENICITY: No data available.

**CARCINOGENICITY:** No data available.

REPRODUCTIVE TOXICITY: No data available.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): No data available.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): No data available.

ASPIRATION HAZARD: No data available.

# 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**TOXICITY**: A component of this product is harmful to aquatic organisms with long lasting effects.

**PERSISTENCE AND DEGRADABILITY**: Adequate data is not available to show the biodegradation potential of this product.

BIOACCUMULATION POTENTIAL: No data available.

MOBILITY IN SOIL: No data available.

### 13. DISPOSAL CONSIDERATION

**WASTE DISPOSAL**: This product should not be allowed to enter waterways or soil. Not suitable for landfill. Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of contents/containers in accordance with applicable laws and regulations and material characteristics at time of disposal.

**EMPTY CONTAINER WARNING (where applicable)**: Empty containers may contain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Do not attempt to refill or clean containers without proper instructions. Empty containers should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Page 4 of 5



1 Tuas West Street, Singapore 637444 Tel (65) 6571 6237 Fax (65) 6897 7562 RCB No 199203169H

### 14. TRANSPORT INFORMATION

**LAND**: Not regulated for Land Transport.

**SEA (IMDG)**: Not regulated for Sea Transport according to IMDG-Code.

AIR (IATA): Not regulated for Air Transport.

### 15. REGULATORY INFORMATION

Not dangerous for conveyance under UN, ADR/RID, IMO and IATA/ICAO. All components comply with TSCA. EU labeling not required.

# 16. OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

#### No revision information is available.

The information contained in this document is based upon data believed to be reliable at the time of going to press and relates only to the matters specifically mentioned in this document. Although Mitsubishi Caterpillar Forklift Asia Pte Ltd has used reasonable skill and care in the preparation of this information, in the absence of any overriding obligations arising under a specific contract, no presentation, warranty (express or implied), or guarantee is made as to the suitability, accuracy, reliability or completeness of the information; nothing in this document shall reduce the user's responsibility to satisfy itself as to the suitability, accuracy, reliability, and completeness of such information for its particular use; there is no warranty against the intellectual property infringement; and Mitsubishi Caterpillar Forklift Asia Pte Ltd shall not be liable for any loss, damage or injury that may occur from the use of this information other than death or personal injury caused by its negligence. No statement shall be construed as an endorsement of any product or process. For greater certainty, before use of information contained in this document, particularly if the product is used for a purpose or under conditions which are abnormal or not reasonably foreseeable, this information must be reviewed with the supplier of such information.

Page 5 of 5