

# Material Safety Data Sheet :

## ISCC EU Certified Used Cooking Oil (Triglycerides, C16-C18 and C18 unsaturated) (derived from vegetable oil)

### Section 1 : Product supplier

**Supplier** : FatHopes Energy Sdn Bhd  
**Supplier Origin** : Malaysia  
**Address** : 6, Jalan TSB5, Kota Damansara Industrial Park, Kota Damansara,  
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**ISCC Certificate no.** : EU - ISCC - Cert - DE 119 - 60153743

**Co. Registration no.** : 920586-W

### Section 2 : Product information

**Product** : Used Cooking Oils & Waste greases from cooking activity  
**Synonyms** : Yellow Grease, Waste Vegetable Oil, Grease Trap Oil, Waste Cooking Oil.  
**Intended use** : As a company policy, solely supplied for the use as **biodiesel feedstock**

### Section 3 : Composition

Chemical Name	CAS. No	Concentration
Oils, vegetable, reclaimed	68990-65-8	100%

**Substances** : Used Cooking Oils & Greases from Kitchens – CAS Number N/A

**Chemical Family** : Triglyceride; Triglycerol & Fatty Acid Chains

Used Vegetable Oil : ~ 99.4%

Water : ~ 0.3%

Impurities : ~ 0.3%

### Section 4 : Hazards identification

Not hazardous in normal handling. Avoid prolonged exposure to skin.

**GHS Classification** : Not Classified

**GHS Label elements** : No symbol

**Hazard statement** : No physical hazard / no health hazard / no environmental hazard

**Other hazards that do not result in classification :**

This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur

**Section 5 : First Aid Measures**

**Eye Contact:** Wash eyes immediately with running water. Remove contact lenses if applicable. Get medical attention if symptoms occur after washing.

**Skin Contact** : Wash skins with soap and water. Get medical attention if symptoms occur after washing.

**Ingestion:** Do not induce vomiting. Drink several glasses of water. Get medical attention if more than 100 mL was ingested.

**Section 6 : Fire Fighting Measures**

**Fire extinguisher Type** : Carbon dioxide, dry powder, or alcohol-resistant foam.

**Fire Fighting procedures** : Wear personal protective equipment (self-contained breathing apparatus and protective clothing) when putting out fire.

**Fire / Explosion Hazards** : None known.

**Section 7 : Accidental Release Measures**

Contain the release. Collect into suitable containers for reclamation or later disposal. Prevent runoff from entering drains, sewers or streams.

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 9 of this Material Safety Data Sheet. See Chapter 14 for disposal consideration. Observe the relevant local and international regulations.

**Personal Precautions, Protective Equipment and Emergency Procedures :**

Do not breathe fumes, vapour. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area and evacuate all personnel. Attempt to disperse the gas or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas meter.

**Environmental Precautions :**

Prevent from spreading or entering into waterways, sewers, basements or confined areas.

### **Methods and Material for Containment and Cleaning Up:**

Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly

## **Section 8 : Handling & Storage**

### **General Precautions :**

Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

### **Precautions for Safe Handling :**

Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. When using do not eat or drink. Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires

### **Conditions of safe storage :**

Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closable containers. Protect from frost. Store separately from oxidising agents. Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable

## **Section 9 : Exposure controls & Personal Protection**

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

**Occupational exposure limits** : Low

**Biological exposure limits** : No biological limits allocated

### **Appropriate engineering controls :**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

**Individual protection measures :**

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers

**Respiratory protection :**

No respiratory protection is ordinarily required conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Select a filter suitable for combined particulate/organic gases and vapors [Type A/ Type P boiling point > 65°C (149°F)] meeting EN14387 and EN143

**Hand protection :**

Select gloves tested to a relevant standard (e.g. Europe EN374, US F739). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended

**Eye protection :**

Wear safety glasses or full face shield if splashes are likely to occur. Approved to EU Standard EN166

**Protection clothing thermal hazard :**

When handling heated product, wear heat resistant gloves, safety hat with visor, and heat resistant coveralls (with cuffs over gloves and legs over boots), and heavy-duty boots, e.g. leather for heat resistance.

**Monitoring methods :**

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory. Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

**Environmental exposure control :**

Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour. Take appropriate measures to fulfil the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water

**Section 9 : Exposure Control / Personal Protection**

**Exposure Limits** : None known.

**Ventilation** : Local Exhaust

**Protective Equipment:** Solvent resistant gloves, splash goggles, appropriate clothing to avoid skin contact (apron and long sleeves are recommended).

**Section 10 : Physical and Chemical Properties**

**Colour** : Yellowish to Dark Brown.  
**Odour** : Mild to strong. Slightly pungent  
**Physical State** : Liquid.  
**pH** : not applicable.  
**Flash Point** : >120°C  
**Evaporation Rate** : No data available.  
**Flammability** : No data available.  
**Flammability Limit (%)** : No data available.  
**Vapour Pressure** : No data available.  
**Vapour Density (Air = 1)** : No data available.  
**Specific Gravity** : 0.93±0.2 (25°C)  
**Solubility in Water** : Insoluble  
**Free fatty acid (palmitic)** : <7%

**Section 11 : Stability and Reactivity**

**Stability:** Stable and hazardous polymerisation will not occur.

**Conditions to Avoid** : High temperature.

**Incompatible Materials** : Strong oxidising agents.

**Hazardous Decomposition Products :**

Combustion produces carbon monoxide, carbon dioxide along with thick smoke.

**Possibility of Hazardous Products** : Will not occur.

**Section 12 : Toxicological Information****Specific Substance(s)**

Acute Toxicity : None

Test Results : No test data available for the ingredients.  
Listed Carcinogens : None.

### Product Information

#### Acute Toxicity

Test Results : No Test data available for the product.  
Other Acute : No additional adverse health effects noted.  
Chronic Toxicity : No additional adverse health effects noted.

### Section 13 : Ecological Information

**Ecotoxicity** : Not expected to be harmful to aquatic organisms. No data available

**Mobility** : No data available.

**Persistence and Degradability** : No data available.

**Other Adverse Effects** : No data available.

### Section 14 : Disposal Considerations

General Information: Do not discharge into drains, water courses or sewers. Discharge, treatment, or disposals are subject to national, state, or local laws.

### Section 15 : Transportation Information

**UN Hazard Class** : Not classified

**ADR/RID-Class** : Not classified

**ADR/RID-Hazard Identification No** : Not classified

**IMDG-Class** : Not classified

**IATA-Class** : Not classified

UK-Transport-Classification : Not classified

### Section 16 : Preparation Date of Material Safety Data Sheet

Prepared by : Fathopes Energy Sdn. Bhd.

Person in charge : XXXXXXXXXX

Phone number of preparer : +603 - 6151 7315

Date Prepared : 16 January 2013

Revised Date : March 2015

### Section 17 : Other Information

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability, or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's

responsibility to satisfy him or herself as to the suitability and completeness of such information for his or her particular use.