



South China Transfer Limited

Section 1: IDENTIFICATION OF SUBSTANCE

Product name:	LIPOFIT [®] Grade A and B
Product composition:	Concentrate of vegetable and animal edible oils, fats and greases recovered from grease trap and similar waste generated by restaurants, food processing and related activities by the recovery process LIPOVAL [®] . Composition is mainly a mixture of saturated, mono-unsaturated and poly-unsaturated fatty acids, mono-, di- or triglycerides. The LIPOFIT [®] is produced in two commercial grades (A and B). The main difference being higher water and grease content in Grade B. Main properties are similar for Grade A and B.
Product application :	Industrial liquid that can be used as fuel additive (in industrial furnaces, boilers, cement manufacturers and alike) or as base product or additive for the manufacturing of biodiesel, detergents, soaps and similar products. Not suitable for human and/or animal consumption.
Manufacturer/Supplier:	South China Transfer Limited 1 Ngong Shung Road Kowloon, Hong Kong Tel: (852) 2316 0876
Emergency information:	Mr. Edwin SO Tel: (852) 2316 6306

Section 2: COMPOSITION / DATA ON COMPONENTS

Component	Percentage (in mass)
Mono-, di or triglycerides	3.5 (0 – 6)
Saturated Fatty Acids	41.5 (13 – 52)
Mono-unsaturated Fatty Acids	39 (13 – 49)
Poly-unsaturated Fatty Acids	8 (3 – 11)
Water	7 (2 – 50)
Impurities (solids and salts)	1 (0.5 – 3)

Notes:

- Typical composition – in view of the nature and origin of material (recovered from grease trap and similar waste), large varieties and deviations from typical composition can occur in individual loads.
- Averages are based on a mixture of 80% LIPOFIT[®] A and 20% LIPOFIT[®] B.
- Concentration between brackets indicates the possible range for LIPOFIT[®] A and B.

Section 3: HAZARDS IDENTIFICATION

Principal dangers:	Flammable on contact with a flame in the presence of oxygen (air).
Risk phrases:	R-10 Inflammable. R-22 Harmful if ingested. R-36 Irritant to the eyes (when product is heated). R-37 Irritant to the respiratory tract (when product is heated). R-38 Irritant to the skin (when product is heated).
Safety phrases:	S-37 Wear appropriate gloves. S-20 Do not eat or drink while using this product. S-64 In case of ingestion, rinse mouth out with water (only if the person is conscious). S-61 Avoid release to the environment. See section 13 for a list of appropriate disposal methods. S-29 Do not dispose of this product in drains or sewers. S-2 Keep out of reach of children.
Transportation of Product:	See Section 14 – “Transport Information”

Section 4: FIRST AID MEASURES

General:	In case of serious or persistent ailments, call your local emergency authority.
Inhalation:	If inhaled in large concentrations, transport the person to fresh air out of the contaminated zone, lay him or her down, loosen all clothing, and consult a doctor.
Skin contact:	Immediately remove all stained clothing and wash the affected areas with soap and water. Consult a doctor if an irritation appears.
Eye contact:	Immediately flush the eyes with water for an extended period of time. Consult an ocular specialist if problems persist.
Ingestion:	Rinse mouth out with water only if the person is conscious. In serious cases, consult a doctor.

Section 5: FIRE FIGHTING MEASURES

Flash point:	See Section 9 – “Physical and Chemical Properties”
Extinguishing agents:	- Appropriate extinguishing materials: CO ₂ extinguisher, powder or foam.

- Inappropriate:
Do not use a pressurized jet of water to disperse the flames.

Explosive dangers: Non-explosive

Particular measures of intervention: In the event of a spillage, cover the product with appropriate absorbent. Afterwards, transfer the used absorbent into a sealable container for later disposal.

Section 6: ACCIDENTAL RELEASE MEASURES

Person-related safety precautions: Keep unprotected persons away.
Wear appropriate protective equipment.
Surfaces may be slippery in the event of a spill.
Ensure adequate ventilation (when product is heated).

Measures of environmental protection: Do not allow product to enter sewers, surface or groundwater.
In the event of a spill, transfer extra product into sealable containers for later disposal.

Methods of collection/cleaning: After product has cooled and is in solid form, shovel into sealable containers and seal hermetically.
Liquid fraction to be contained and removed by pumping (large quantities) or by absorption with suitable absorbent (small quantities).
Wash the affected areas with a sufficient quantity of lukewarm water.
Clean all affected materials and clothes after work.

Section 7: HANDLING AND STORAGE

General use: This product does not present any risk of emission or exposure to dangerous chemical products under normal use conditions.

HANDLING:

Safe handling: Avoid contact with skin.
Avoid respiration of vapours.
Do not eat or drink while using this product.

Protection against fires: Avoid direct heat sources.

Protection against explosions: This product is non-explosive.

STORAGE:

Technical measures:	Storage tanks must be designed so that the risk of soil and water pollution is minimized and in accordance with applicable local standards.
Storage conditions:	Product must be stored in specially-designed and designated tanks between 70-80°C (158-176°F), in the absence of any sources of excessive heat and open flames.
Storage material:	Use only containers, pipes, and plumbing which are resistant to organic acidic products. Appropriate materials: Stainless steel, fluorinated polyethylene, fluorinated polypropylene, Teflon. -Inappropriate materials: Copper, brass, lead, tin, zinc or common steel.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Breathing equipment:	Use protection mask against volatiles organics when heated product produces a nontoxic but acrid odour which may be irritating to the mucus membrane passages.
Protection of hands:	Impermeable and heat-resistant gloves should be worn when product is in hot liquid form. For more information about the selection of appropriate gloves, contact glove manufacturer.
Eye protection:	Safety glasses/goggles.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid at 20°C (68°F); liquid >55°C (131°F)
Colour:	Brown
Odour:	Can be acrid and pungent when product is heated
Density at 15°C:	LIPOFIT® A – 913 kg/m ³ (902 – 944) LIPOFIT® B – 940 kg/m ³ (916 – 976)
Flash point:	LIPOFIT® A ~200°C LIPOFIT® B ~160°C
Ignition temperature:	>200°C
Danger of explosion:	Product is not explosive under recommended storage conditions.
Temperatures at phase change:	Lower melting point: 35°C (95°F) (ASTM D97 A)

Upper melting point: 60°C (140°F) (ASTM D97 A)

Solubility: Insoluble and practically immiscible in water
Soluble in many common organic solvents
Soluble in fatty substances

Viscosity: LIPOFIT® A ~ 5.2 mm²/s at 100°C
LIPOFIT® B ~ 7.2 mm²/s at 100°C

Carbon source: Biomass

pH: average 4.5 (3 - 5)

Section 10: STABILITY AND REACTIVITY

Stability: Product is stable at normal storage, handling, and use temperatures. A long time of storage can lead to the hydrolysis of triglycerides and increasing amounts of free fatty acids.

Dangerous reactions: No dangerous reactions known.

Dangerous products of decomposition: Products of decomposition known to be toxic to varying degrees such as CO, CO₂, aldehydes, methane, and ketones may be released after a strong oxidation, heating, or a reaction with other substances. Under recommended use conditions however, dangerous products of decomposition should not be emitted.

Conditions to avoid: Do not store in normal concrete due to the acidity of the product: risk of corrosion. Avoid excessive heat sources.

Materials to avoid: Copper, brass, lead, tin, zinc or common steel (high risk of oxidation).

Section 11: TOXICOLOGICAL INFORMATION

Effects in case of inhalation: Irritation may occur.

Effects in case of contact with skin: Irritation may occur.

Effects in case of contact with eyes: Irritation may occur.

Effects in case of ingestion: This product is improper for human and/or animal consumption, Accidental ingestion of small quantities presents little to no risk on human health.

Section 12: ECOLOGICAL INFORMATION

General notes: Water hazard class 1 (assessment by list): slightly hazardous for water.

Do not allow large quantities or undiluted product to reach groundwater, waterways, or sewage systems.

Ecotoxicity: Not determined.

Other information: Given the diversity of regulations, contact the appropriate competent authority before disposal.

Section 13: DISPOSAL CONSIDERATIONS

Product:

In liquid form:

Recommendation: Do not dispose of in sewers. Product must be disposed of in accordance with the local environmental control regulations.

In solid form:

Recommendation: Dispose of solid-state product in a landfill or in accordance with the local environmental control regulations.

Waste disposal: Recycle or dispose of in accordance with the local environmental control regulations.

Section 14: TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO, ADR/RID and IATA/ICAO codes.

Section 15: OTHER INFORMATION

Emergency contact: Mr. Edwin SO
Tel: (852) 2316 6306

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This materials safety data sheet serves to complete but not to replace the technical data product sheet. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating this activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.