

SAFETY DATA SHEET



Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Section 1. Identification

GHS product identifier Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))
Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))
SDS no. Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))
Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture Flushing oil.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Manufacturer BP - Castrol (Thailand) Limited
Samut Sakon Industrial Estate, 39/77-78 Moo 2 Rama II Road,
Bangkachao Amphur Muang, Samut Sakon 74000
Tel. +66 34 419666, Fax. +66 34 419666
Supplier BP - Castrol (Thailand) Limited
3 Rajanakarn Building, 23rd Floor
South Sathon Road Yannawa,
Sathon Bangkok 10120
Tel. +66 02 6843555, Fax. +66 02 684 3646
EMERGENCY TELEPHONE NUMBER Carechem: 001800 1 2066 6751 (tollfree, access from Thailand only)

Section 2. Hazards identification

GHS Classification SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3
GHS label elements
Signal word No signal word.
Hazard statements H402 - Harmful to aquatic life.
Precautionary statements
General P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.
Prevention P273 - Avoid release to the environment.
Response Not applicable.
Storage Not applicable.
Disposal P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification None known.

Section 3. Composition/information on ingredients

Substance/mixture Mixture
Highly refined base oil (IP 346 DMSO extract < 3%); Synthetic base stock.; Chemically modified base oil; Proprietary performance additives.

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥90	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	64742-65-0
Distillates (petroleum), solvent-refined heavy paraffinic	≤3	64741-88-4
Bis (2-hydroxyethyl) tallow alkylamine	<0.1	61791-44-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Page: 1/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)

Section 4. First aid measures

Description of necessary first aid measures

Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse health effects persist or are severe.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments	No specific treatment.
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	Use foam or all-purpose dry chemical to extinguish.
Unsuitable extinguishing media	Do not use water jet.

Specific hazards arising from the chemical Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life.

Hazardous thermal decomposition products Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

Special protective actions for fire-fighters No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
For emergency responders	Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and material for containment and cleaning up

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Page: 2/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)

Section 6. Accidental release measures

Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilt material and runoff with soil and surface waterways.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction
Distillates (petroleum), solvent-refined heavy paraffinic	ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

Biological exposure indices

No exposure indices known.

Section 8. Exposure controls/personal protection

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Eye protection

Safety glasses with side shields.

Skin protection

Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Skin protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state

Liquid.

Colour

Brown. [Transparent]

Odour

Not available.

Odour threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Boiling point, initial boiling point, and boiling range

Not available.

Drop Point

Not available.

Flash point

Closed cup: 208°C (406.4°F) [Pensky-Martens ASTM D 93]

Evaporation rate

Not available.

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Page: 4/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)

Section 9. Physical and chemical properties

Flammability Not applicable. Based on - Physical state

Lower and upper explosion limit/flammability limit Not available.

Vapour pressure

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191			
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191			
Distillates (petroleum), solvent-refined heavy paraffinic	<0.08	<0.011	ASTM D 5191			

Relative vapour density Not available.

Relative density Not available.

Density <1000 kg/m³ (<1 g/cm³) at 15°C

Solubility(ies) :
Not available.

Partition coefficient: n-octanol/water Not applicable.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Kinematic: 96.59 mm²/s (96.59 cSt) at 40°C
Kinematic: 12.59 mm²/s (12.59 cSt) at 100°C

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

Chemical stability The product is stable.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerisation will not occur.

Conditions to avoid Avoid all possible sources of ignition (spark or flame).

Incompatible materials Reactive or incompatible with the following materials: oxidising materials.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

Skin contact Defatting to the skin. May cause skin dryness and irritation.

Ingestion No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Inhalation May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Page: 5/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)

Section 11. Toxicological information

Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.
<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>	
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
<u>Potential chronic health effects</u>	
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Section 12. Ecological information

Environmental effects	This material is harmful to aquatic life.
<u>Persistence and degradability</u>	
Partially biodegradable.	
<u>Bioaccumulative potential</u>	
This product is not expected to bioaccumulate through food chains in the environment.	
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other adverse effects	No known significant effects or critical hazards.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
-------------------------	--

Section 14. Transport information

	UN	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Page: 6/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)

Section 14. Transport information

Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user Not available.

Transport in bulk according to IMO instruments Not available.

Section 15. Regulatory information

Regulation according to other foreign laws

Australia inventory (AIIC) All components are listed or exempted.

Canada inventory status At least one component is not listed.

China inventory (IECSC) At least one component is not listed.

REACH Status For the REACH status of this product please consult your company contact, as identified in Section 1.

Japan inventory (CSCL) At least one component is not listed.

Korea inventory (KECI) At least one component is not listed.

Philippines inventory (PICCS) At least one component is not listed.

United States inventory (TSCA 8b) Not determined.

Taiwan Chemical Substances Inventory (TCSI) Not determined.

Harmful Chemicals List Listed

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

Section 16. Other information

History

Date of issue/Date of revision 14/06/2023.

Date of previous issue 07/02/2023.

Prepared by Product Stewardship

Key to abbreviations

ACGIH = American Conference of Industrial Hygienists
CAS Number = Chemical Abstracts Service Registry Number
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
OEL = Occupational Exposure Limit
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
SDS = Safety Data Sheet
STEL = Short term exposure limit
TWA = Time weighted average
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods. Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Page: 7/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)

Section 16. Other information

References

Not available.

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

Product name Samut Sakon Mixed Oil MO-05 (ZTH0107-1 (1))

Product code Samut Sakon Mixed
Oil MO-05
(ZTH0107-1 (1))

Page: 8/8

Version 2

Date of issue 14/06/2023.

Format GHS - Thailand

Language ENGLISH

Build 5.0.4

(GHS - Thailand)

(ENGLISH)