

According to GHS 3rd Revised Edition

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

1.1. GHS product identifier

Product name: **RACING SYNTHETIC 10W-40**

Other means of identification: Engine oil

1.2. Recommended uses of the chemical and restriction on uses

Recommended use

Lubricants for 4T engines

Restrictions on use

None specified

1.3. Details of the manufacturer / supplier of the safety data sheet

Supplier

DUCKHAMS ENERGIES, Co.,Ltd
6/69 Thanonyanphaholyothin, Phyathai,
Phyathai, Bangkok, 10400
Thailand.

Sales Tel: +668 00709009
Technical Tel +668 77078655

1.4 Emergency telephone number

Tel: +662 4340540



SECTION 2: HAZARDS IDENTIFICATION

2.1. GHS classification of the substance or mixture

2.1.1. According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 3rd Revised Edition":

Product: Mixture

Physical Hazards	Not classified
Health Hazards	Not classified
Environmental Hazards	Not classified

2.1.2. Additional information:

None

2.2. GHS label elements

Labelling according to GHS 3rd Revised Edition

Hazard Pictogram

Not applicable

Signal word
Not applicable

Hazard statements
Not applicable

Precautionary statements
Not applicable

2.3. Other hazards which do not result in GHS classification
None known

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.1 Mixtures or substances
Mixtures of base oil and additives.

Chemical identity	CAS Number	Concentration (% weight)	Ingredients hazard code
Zinc alkyl dithiophosphate	68649-42-3	1 - 3	H411

* Remaining ingredients which within the current knowledge of the supplier are not classified as hazardous to health or the environment, or below the applicable cut-off concentration, and hence do not require disclosure in this section as according to GHS.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice:
Treat according to symptoms.

Skin contact:
Rinse with soap and plenty of water and remove contaminated clothing and shoes. Get medical treatment if symptoms prolong.

Inhalation:
Remove to fresh air. No specific first aid measures are required.

Eye contact:
Rinse immediately with running water, also under the eyelids for 15 minutes. Check for and remove any contact lenses. See a medical doctor or ophthalmologist for treatment in case of any symptoms.

Ingestion:
Wash out mouth with water. Remove dentures if any. Drink glasses of water or milk to dilute. If any symptoms appear get medical treatment. Do not induce vomiting.

Protection of first-aiders:
Wear personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed
No effect expected.

4.3. Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Alcohol resistant foam. Water fog. Carbon dioxide (CO₂). Dry chemical powder, sand or earth may be used for small fires.

Unsuitable extinguishing media:

Do not use water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced such carbon monoxide, carbon dioxide, other pyrolysis products typical of burning organic material.

5.3. Special protective equipment and precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Put on appropriate personal protective equipment. Do not touch or walk through spilled material because it is slippery.

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Collect spillage. Report spills to local authorities as appropriate or required.

6.3. Methods and materials for containment and cleaning up

Stop leak if without risk. Spills can be reused or recycled if possible. Absorb spills in special absorbents or inert materials such as diatomite or vermiculite and collect in suitable container for disposal. For large spills, dyke spilt material or otherwise contain material to ensure runoff does not reach a waterway. Dispose of as special waste in compliance with local and national regulations. Prevent further leakage or spillage if safe to do so.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Use and handle in well ventilated areas. Use personal protective equipment as required. Keep away from heat and ignition sources. Handle in accordance with good industrial hygiene and safety practise. 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. Empty containers should be completely drained, properly closed, and disposed of properly.

Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.2. Conditions for safe storage, including any incompatibilities

Store under cover away from moisture and sources of ignition. Do not overheat in storage. Keep container tightly sealed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

National occupational exposure limits / Biological occupational exposure limits:

In case of no local standards for exposure limits, values of other countries are be stated for information purpose.

Components	TWA
Highly purified base oil	Not available

Recommended monitoring procedures

Not required under sufficient ventilation.

8.2. Appropriate engineering controls

General ventilation should be designed to prevent accumulation and recirculation in the workplace.

8.3 Individual protection measures, personal protective equipment

Handle in accordance with good industrial hygiene and safety practise.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Eye protection:

Wear safety glasses with side shields, goggles or face shield.

Protective clothing:

Wear suitable protective clothing and chemical resistant gloves which includes nitrile rubber gloves, etc.

Ventilation:

Provide adequate ventilation when processing material at elevated temperatures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour:	Amber to brown
Odour:	Strawberry
Odour Threshold:	No data available
pH:	Not applicable
Melting point/ freezing point (°C):	No data available
Boiling point (°C):	No data available
Flash point, COC (°C):	256
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Vapour pressure:	No data available
Vapour density:	No data available
Density (g/cm ³):	0.8541 (15°C)
Solubility:	Not soluble in water
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature (°C):	No data available
Decomposition temperature (°C):	No data available
Viscosity, kinematic (mm ² /s):	98.83 (40°C)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

May react with oxidizing agents.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

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

10.4. Condition to Avoid

Keep away from all sources of ignition, heat, sparks, flame. Avoid strong oxidising conditions. Avoid extended exposure to temperatures above 60° C in the presence of air.

10.5. Incompatible materials:

Oxidizing agents.

10.6. Hazardous Decomposition Products

Incomplete combustion will generate smoke, toxic fume, carbon dioxide and hazardous gases, including carbon monoxide, aldehydes. Ketones, nitrous gases (NOx) and sulphurous gases (SOx).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the likely routes of exposure

11.2 Symptoms related to physical, chemical and toxicological characteristics

Skin contact

No effect expected.

Eye contact

Discomfort.

Inhalation

No effect expected.

Ingestion

Mild discomfort.

Carcinogenic effects

Based on available data, the classification criteria are not met.

Mutagenic effects

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT - single exposure

Based on available data, the classification criteria are not met.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.3 Delayed and immediate effects and also chronic effects from short- and long-term exposure

Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.

11.4 Numerical measures of toxicity

Components	LD50/oral/rat	LC50/inhalation/rat	LD50/dermal/rabbit
Base oil	>5,000 mg/kg	No data available	>5,000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Eco-Toxicity (aquatic and terrestrial)

Components	Type	Freshwater Fish Species	Test Method
Base oil	96 hr LL ₅₀	>1,000 mg/l	-

Components	Type	Crustacea	Test Method
Base oil	96 hr EL ₅₀	>1,000 mg/l	-

Components	Type	Algae	Test Method
Base oil	Acute IC ₅₀ 72 hr	>1,000 mg/l	-

12.2. Persistence and degradability

Expected to be readily biodegradable but the product contains components that may persist in the environment.

12.3. Bioaccumulative potential

Product is not likely to accumulate in biological organisms.

12.4. Mobility in soil

The product will absorb to the soil particles and will not be mobile.

12.5. Other adverse effects

Films formed on water may affect oxygen transfer and damage organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products:

Reuse or recycle whenever possible. If not, dispose of in accordance with hazardous waste management regulations of the country of use.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal in accordance with hazardous waste management regulations of the country of use.

Relevant regulation:

Hazardous waste management regulations of the country of use.

SECTION 14: TRANSPORTATION INFORMATION

14.1. UN-Number

Not regulated

14.2. UN proper shipping name

Not regulated

14.3. Transport hazard class

Not regulated

14.4. Packing group

Not regulated

14.4.1. Further information for transport

IMDG

Not regulated

ADR/RID

Not regulated

ICAO/IATA

Not regulated

14.5. Environmental hazards:

None.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not evaluated.

14.7. Special precautions for user

None required.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This product is not considered as hazardous according to the classification criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 3rd Revised Edition.

Further Information:

This SDS is prepared for the purpose of providing safety information for transportation and occupational handling conditions.

SECTION 16: OTHER INFORMATION

This safety data sheet has been prepared according to following regulations:

Local regulations adopting Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 3rd Revised Edition.

Hazard statements:

Not applicable for this product.

Revision	1
Issued Date:	02.04.2024
SDS prepared by:	Duckhams Energy Co.,Ltd.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, processing, storage, transportation, disposal and accidental release and is not to be considered a warranty or quality specification. 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 process, unless specified in the text. We do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of, or in any way connected with the handling, storage, use, or disposal of this product.

According to GHS 3rd Revised Edition

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

1.1. GHS product identifier

Product name: **RACING SYNTHETIC 10W-50**

Other means of identification: Engine oil

1.2. Recommended uses of the chemical and restriction on uses

Recommended use
Lubricants for 4T engines

Restrictions on use
None specified

1.3. Details of the manufacturer / supplier of the safety data sheet

Supplier
DUCKHAMS ENERGIES, Co.,Ltd
6/69 Thanonyanphaholyothin, Phyathai,
Phyathai, Bangkok, 10400
Thailand.

Sales Tel: +668 00709009
Technical Tel +668 77078655

1.4 Emergency telephone number
Tel: +662 4340540



SECTION 2: HAZARDS IDENTIFICATION

2.1. GHS classification of the substance or mixture

2.1.1. According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 3rd Revised Edition":

Product: Mixture

Physical Hazards	Not classified
Health Hazards	Not classified
Environmental Hazards	Not classified

2.1.2. Additional information:
None

2.2. GHS label elements
Labelling according to GHS 3rd Revised Edition

Hazard Pictogram
Not applicable

Signal word
Not applicable

Hazard statements
Not applicable

Precautionary statements
Not applicable

2.3. Other hazards which do not result in GHS classification
None known

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.1 Mixtures or substances
Mixtures of base oil and additives.

Chemical identity	CAS Number	Concentration (% weight)	Ingredients hazard code
Zinc alkyl dithiophosphate	68649-42-3	1 - 3	H411

* Remaining ingredients which within the current knowledge of the supplier are not classified as hazardous to health or the environment, or below the applicable cut-off concentration, and hence do not require disclosure in this section as according to GHS.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice:
Treat according to symptoms.

Skin contact:
Rinse with soap and plenty of water and remove contaminated clothing and shoes. Get medical treatment if symptoms prolong.

Inhalation:
Remove to fresh air. No specific first aid measures are required.

Eye contact:
Rinse immediately with running water, also under the eyelids for 15 minutes. Check for and remove any contact lenses. See a medical doctor or ophthalmologist for treatment in case of any symptoms.

Ingestion:
Wash out mouth with water. Remove dentures if any. Drink glasses of water or milk to dilute. If any symptoms appear get medical treatment. Do not induce vomiting.

Protection of first-aiders:
Wear personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed
No effect expected.

4.3. Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Alcohol resistant foam. Water fog. Carbon dioxide (CO₂). Dry chemical powder, sand or earth may be used for small fires.

Unsuitable extinguishing media:

Do not use water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced such carbon monoxide, carbon dioxide, other pyrolysis products typical of burning organic material.

5.3. Special protective equipment and precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Put on appropriate personal protective equipment. Do not touch or walk through spilled material because it is slippery.

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Collect spillage. Report spills to local authorities as appropriate or required.

6.3. Methods and materials for containment and cleaning up

Stop leak if without risk. Spills can be reused or recycled if possible. Absorb spills in special absorbents or inert materials such as diatomite or vermiculite and collect in suitable container for disposal. For large spills, dyke spilt material or otherwise contain material to ensure runoff does not reach a waterway. Dispose of as special waste in compliance with local and national regulations. Prevent further leakage or spillage if safe to do so.

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7.1. Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Use and handle in well ventilated areas. Use personal protective equipment as required. Keep away from heat and ignition sources. Handle in accordance with good industrial hygiene and safety practise. 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. Empty containers should be completely drained, properly closed, and disposed of properly.

Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.2. Conditions for safe storage, including any incompatibilities

Store under cover away from moisture and sources of ignition. Do not overheat in storage. Keep container tightly sealed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

National occupational exposure limits / Biological occupational exposure limits:

In case of no local standards for exposure limits, values of other countries are be stated for information purpose.

Components	TWA
Highly purified base oil	Not available

Recommended monitoring procedures

Not required under sufficient ventilation.

8.2. Appropriate engineering controls

General ventilation should be designed to prevent accumulation and recirculation in the workplace.

8.3 Individual protection measures, personal protective equipment

Handle in accordance with good industrial hygiene and safety practise.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Eye protection:

Wear safety glasses with side shields, goggles or face shield.

Protective clothing:

Wear suitable protective clothing and chemical resistant gloves which includes nitrile rubber gloves, etc.

Ventilation:

Provide adequate ventilation when processing material at elevated temperatures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour:	Amber to brown
Odour:	Strawberry
Odour Threshold:	No data available
pH:	Not applicable
Melting point/ freezing point (°C):	No data available
Boiling point (°C):	No data available
Flash point, COC (°C):	258
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Vapour pressure:	No data available
Vapour density:	No data available
Density (g/cm ³):	0.8545 (15°C)
Solubility:	Not soluble in water
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature (°C):	No data available
Decomposition temperature (°C):	No data available
Viscosity, kinematic (mm ² /s):	119.1 (40°C)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

May react with oxidizing agents.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

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

10.4. Condition to Avoid

Keep away from all sources of ignition, heat, sparks, flame. Avoid strong oxidising conditions. Avoid extended exposure to temperatures above 60° C in the presence of air.

10.5. Incompatible materials:

Oxidizing agents.

10.6. Hazardous Decomposition Products

Incomplete combustion will generate smoke, toxic fume, carbon dioxide and hazardous gases, including carbon monoxide, aldehydes. Ketones, nitrous gases (NOx) and sulphurous gases (SOx).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the likely routes of exposure

11.2 Symptoms related to physical, chemical and toxicological characteristics

Skin contact

No effect expected.

Eye contact

Discomfort.

Inhalation

No effect expected.

Ingestion

Mild discomfort.

Carcinogenic effects

Based on available data, the classification criteria are not met.

Mutagenic effects

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT - single exposure

Based on available data, the classification criteria are not met.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.3 Delayed and immediate effects and also chronic effects from short- and long-term exposure

Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis.

11.4 Numerical measures of toxicity

DUCKHAMS
KEEPS YOU MOVING

Components	LD50/oral/rat	LC50/inhalation/rat	LD50/dermal/rabbit
Base oil	>5,000 mg/kg	No data available	>5,000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Eco-Toxicity (aquatic and terrestrial)

Components	Type	Freshwater Fish Species	Test Method
Base oil	96 hr LL ₅₀	>1,000 mg/l	-

Components	Type	Crustacea	Test Method
Base oil	96 hr EL ₅₀	>1,000 mg/l	-

Components	Type	Algae	Test Method
Base oil	Acute IC ₅₀ 72 hr	>1,000 mg/l	-

12.2. Persistence and degradability

Expected to be readily biodegradable but the product contains components that may persist in the environment.

12.3. Bioaccumulative potential

Product is not likely to accumulate in biological organisms.

12.4. Mobility in soil

The product will absorb to the soil particles and will not be mobile.

12.5. Other adverse effects

Films formed on water may affect oxygen transfer and damage organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products:

Reuse or recycle whenever possible. If not, dispose of in accordance with hazardous waste management regulations of the country of use.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal in accordance with hazardous waste management regulations of the country of use.

Relevant regulation:

Hazardous waste management regulations of the country of use.

SECTION 14: TRANSPORTATION INFORMATION

14.1. UN-Number

Not regulated

14.2. UN proper shipping name

Not regulated

14.3. Transport hazard class

Not regulated

14.4. Packing group

Not regulated

14.4.1. Further information for transport

IMDG

Not regulated

ADR/RID

Not regulated

ICAO/IATA

Not regulated

14.5. Environmental hazards:

None.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not evaluated.

14.7. Special precautions for user

None required.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This product is not considered as hazardous according to the classification criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 3rd Revised Edition.

Further Information:

This SDS is prepared for the purpose of providing safety information for transportation and occupational handling conditions.

SECTION 16: OTHER INFORMATION

This safety data sheet has been prepared according to following regulations:

Local regulations adopting Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 3rd Revised Edition.

Hazard statements:

Not applicable for this product.

Revision 1

Issued Date: 02.04.2024

SDS prepared by: Duckhams Energy Co.,Ltd.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, processing, storage, transportation, disposal and accidental release and is not to be considered a warranty or quality specification. 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 process, unless specified in the text. We do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of, or in any way connected with the handling, storage, use, or disposal of this product.