

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Revision date 19-Jun-2024

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) 124310
Safety data sheet number 124310
Product Name PETRONAS SYNTIUM X 10W 40

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Engine oil

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

Not classified

Hazard statements

Not classified
EUH210 - Safety data sheet available on request

Unknown aquatic toxicity

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
LUBRICATING OILS 74869-22-0	50 - 60%	278-012-2	-	-	-	-	-
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC 64742-65-0	0 - 10%	265-169-7	-	Asp. Tox. 1 (H304)	-	-	-
SULPHURISED CALCIUM PHENATE -	0 - 10%	701-251-5	-	Aquatic Chronic 4 (H413)	-	-	-
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS 84605-29-8	0 - 10%	283-392-8	-	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Eye Dam. 1 :: C>12.5% Eye Irrit. 2 :: 10%<=C<12.5% Skin Irrit. 2 :: C>=6.25%	-	-
PHENOL TETRAPROPENYL DERIVATIVES 74499-35-7	0 - 10%	(604-092-00-9)	-	Skin Corr. 1C (H314) Eye Dam. 1 (H318) Repr. 1B (H360F) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	10	10

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air. Get medical attention if symptoms occur.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed

Eyes	May cause temporary eye irritation.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Carbon oxides. Phosphorus oxides. Oxides of sulphur. Nitrogen oxides (NOx).
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)

See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC 64742-65-0		0.97 mg/kg bw/day [4] [6]	5.4 mg/m ³ [5] [6]
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS 84605-29-8		12.1 mg/kg bw/day [4] [6]	8.31 mg/m ³ [4] [6]

[4] Systemic health effects.

[5] Local health effects.

[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC 64742-65-0	0.74 mg/kg bw/day [4] [6]		1.2 mg/m ³ [5] [6]
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS 84605-29-8	0.24 mg/kg bw/day [4] [6]		2.11 mg/m ³ [4] [6]

[4] Systemic health effects.
 [5] Local health effects.
 [6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLB UTYL AND ISO-PR) ESTERS, ZINC SALTS 84605-29-8	4 µg/L	45 µg/L	4.6 µg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC 64742-65-0					9.33 mg/kg food
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLB UTYL AND ISO-PR) ESTERS, ZINC SALTS 84605-29-8	0.02203 mg/kg sediment dw	0.002203 mg/kg sediment dw	100 mg/L	0.00206 mg/kg soil dw	10.67 mg/kg food

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Nitrile rubber. Neoprene gloves. Gloves must conform to standard EN 374.

Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Colour	Amber
Odour	No information available.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No information available.
Initial boiling point and boiling range	> 300.00 °C	ASTM D2887.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	206.00 °C	(ASTM D93).
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity	92.20 cSt	40.0 °C.
Dynamic viscosity		No information available.
Water solubility	Immiscible in water	
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapour pressure		No information available.
Relative density	0.86	ASTM D4052.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under recommended storage conditions.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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Explosion data**Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**10.3. Possibility of hazardous reactions****Possibility of hazardous reactions** None under normal processing.**10.4. Conditions to avoid****Conditions to avoid** Excessive heat.**10.5. Incompatible materials****Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.**10.6. Hazardous decomposition products****Hazardous decomposition products** Carbon oxides. Nitrogen oxides (NOx). Phosphorus oxides. Oxides of sulphur.**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information****Inhalation** May cause irritation.**Eye contact** May cause temporary eye irritation.**Skin contact** May cause slight irritation.**Ingestion** Gastrointestinal discomfort.**Symptoms related to the physical, chemical and toxicological characteristics****Symptoms** No information available.**Acute toxicity****Numerical measures of toxicity****The following values are calculated based on chapter 3.1 of the GHS document****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS	= 3100 mg/kg (Rat) = 3200 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.3 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitisation	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	United Kingdom
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC	-

Reproductive toxicity	No information available.
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The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	United Kingdom
PHENOL TETRAPROPENYL DERIVATIVES	Repr. 1B

STOT - single exposure	No information available.
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STOT - repeated exposure	No information available.
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Aspiration hazard	No information available.
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Other adverse effects	No information available.
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SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Not considered to be harmful to aquatic life.
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Unknown aquatic toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYL BUTYL AND ISO-PR)	-	LC50: =4.5mg/L (96h, Oncorhynchus mykiss)	-	EC50: =23mg/L (48h, Daphnia magna)

ESTERS, ZINC SALTS				
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12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Chemical name	Partition coefficient
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS	0.56

12.4. Mobility in soil

Mobility in soil Insoluble.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC	The substance is not PBT / vPvB
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information**IATA**

- 14.1 UN number or ID number Not regulated
- 14.2
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
- Special Provisions None

IMDG

- 14.1 UN number or ID number Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated

14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
DISTILLATES (PETROLEUM) SOLVENT DEWAXED HEAVY PARAFFINIC - 64742-65-0	-	-
PHENOL TETRAPROPENYL DERIVATIVES - 74499-35-7	Use restricted. See item 30. Restricted Reproductive Toxin 1B	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECI	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AIIC	- Australian Inventory of Industrial Chemicals
NZIoC	- New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report	No information available
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SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H304	- May be fatal if swallowed and enters airways
H314	- Causes severe skin burns and eye damage
H318	- Causes serious eye damage
H360F	- May damage fertility
H400	- Very toxic to aquatic life
H410	- Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		
Revision Note ***Indicates updated data since last publication			

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method

Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Revision date 19-Jun-2024

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Disclaimer

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 a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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.

End of Safety Data Sheet