QUANTUM® PRIMUS EXTRA SHPD 20W50

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 6/1/2017 Supersedes: 5/1/2015

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	**QUANTUM® PRIMUS EXTRA SHPD 20W50**
Product code	:	T2302
Type of product	:	Engine oils,Use in lubricants
Synonyms	:	Engine oils
Product group	:	Blend

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

1.2.1. Relevant identified uses

Intended for general public

Main use category	:	Consumer use,Professional use
Industrial/Professional use spec	:	Distribution Formulation & (re)packing of substances and mixtures Used in closed systems Engine oils
Function or use category	:	Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

1.4. Emergency telephone number

Emergency number : +30 210 779 37 77

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes eye irritation. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS07

Signal word (CLP)	:	Warning
Hazardous ingredients	:	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts
Hazard statements (CLP)	:	H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P262 - Do not get in eyes, on skin, or on clothing. P264 - Wash hands thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see Label elements on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH210 - Safety data sheet available on request.

Child-resistant fastening : Not applicable

Tactile warning : Not applicable

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (REACH-no) 01-2119484627-25-0035; 01-2119484627-25-0025;01-2119471299-27-0019	< 89	Expl. Not classified
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	(CAS-No.) 84605-29-8 (EC-No.) 283-392-8 (REACH-no) 01-2119493626-26	0.7 - 1.1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	(CAS-No.) 70024-69-0 (EC-No.) 274-263-7 (REACH-no) 01-2119492616-28	0.1 - 1	Skin Sens. 1B, H317
Bis(nonylfenyl)amine	(CAS-No.) 36878-20-3 (EC-No.) 253-249-4 (REACH-no) 01-2119488911-28	0.1 - 0.6	Aquatic Chronic 4, H413
phenol,dodecyl-, branched	(CAS-No.) 121158-58-5 (EC-No.) 310-154-3 (REACH-no) 01-2119513207-49	0.1 - 0.25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361f Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Comments : Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Give oxygen or artificial respiration if necessary. Remove person to fresh air and keep comfortable for breathing. Get immediate medical advice/attention.

First-aid measures after skin contact : Wash skin with plenty of water. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	:	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	:	May cause drowsiness or dizziness. May cause headache, nausea and irritation of respiratory tract.
Symptoms/effects after skin contact	:	May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	:	Eye irritation. redness, itching, tears.
Symptoms/effects after ingestion	:	Ingestion may cause nausea and vomiting. Risk of lung oedema.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	In case of fire and/or explosion do not breathe fumes.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	:	Evacuate area. Eliminate all ignition sources if safe to do so.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	:	On exposure to high temperature, may decompose, releasing toxic gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Clean up any spills as soon as possible, using an absorbent material to collect it. Eliminate every possible source of ignition.

6.1.1. For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapours.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Ventilate area. Stop release. Cover spill with non combustible material, e.g.: sand/earth. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage.
Methods for cleaning up	:	Take up liquid spill into absorbent material.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing mist, vapours. Wear personal protective equipment.
Hygiene measures	:	Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Comply with applicable regulations. Use only non-sparking tools.
Storage conditions	:	Store in a well-ventilated place. Keep cool.
Incompatible products	:	Oxidizing agent.
Incompatible materials	:	Sources of ignition.

7.3. Specific end use(s)

Product information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
EU	IOELV TWA (mg/m³)	5 mg/m³
EU	IOELV STEL (mg/m³)	10 mg/m³

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Protective clothing. Protective goggles.

Hand protection:

protective gloves: neoprene gloves, PVA. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). EN 420

Eye protection:

Safety glasses. EN 166. EN 168

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. EN 405

Personal protective equipment symbol(s):

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	brown.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	-30 °C
Boiling point	:	> 315 °C
Flash point	:	236 °C
Auto-ignition temperature	:	> 315 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	< 10 Pa
Relative vapour density at 20 °C	:	> 1
Relative density	:	No data available
Density	:	0.886 g/ml
Solubility	:	soluble in most organic solvents.
Log Pow	:	No data available
Viscosity, kinematic	:	169 cSt @40°C

Viscosity, dynamic	:	No data available
Explosive properties	:	Not applicable.
Oxidising properties	:	Not applicable.
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403 method)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
LD50 oral rat	≈ 4468 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 2002 mg/kg bodyweight (OECD 402 method)
LC50 inhalation rat (mg/l)	> 2.3 mg/l (OECD 403 method)

phenol,dodecyl-, branched (121158-58-5)	
LD50 oral rat	2100 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	15000 mg/kg bodyweight (OECD 402 method)

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP
Carcinogenicity	:	This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP
Reproductive toxicity	:	This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP
STOT-single exposure	:	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)

phenol,dodecyl-, branched (121158-58-5)	
NOAEL (oral, rat, 90 days)	15 mg/kg bodyweight/day (OECD 416 method)
NOAEL (subacute, oral, animal/male, 28 days)	60 mg/kg bodyweight (OECD 407 method)

Aspiration hazard	:	Not classified

QUANTUM® PRIMUS EXTRA SHPD 20W50	
Viscosity, kinematic	169 mm²/s @40°C

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 fish 1	> 100 mg/l (OECD 203 method)
EC50 Daphnia 1	> 10000 mg/l (OECD 202 method)
EC50 72h algae (1)	> 1000 mg/l (OECD 201 method)
NOEL, aquatic invertebrates, Chronic	< 1 mg/l (21 days, (OECD 211 method))
NOEL, algae, Chronic	> 100 mg/l (72 Hours, (OECD 201 method))
NOEL, microorganisms, Chronic	> 1.93 mg/l (10 minutes, DIN 38412)
NOEL, daphnia, Chronic	> 10 mg/l (21 days)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
LC50 fish 1	> 4.6 mg/l (OECD 203 method)
LC50 fish 2	> 46 mg/l (OECD 203 method)
EC50 Daphnia 1	23 mg/l (OECD 202 method)
ErC50 (algae)	> 10000 mg/l (OECD 209 method)
NOEC (acute)	< 26 mg/l (OECD 203 method)
NOEC chronic crustacea	> 10 mg/l

phenol,dodecyl-, branched (121158-58-5)	
LC50 fish 1	40 mg/l (OECD 203 method)
EC50 Daphnia 1	> 0.037 mg/l (OECD 202 method)
EC50 other aquatic organisms 1	> 1000 mg/l
EC50 72h algae (1)	0.36 mg/l (OECD 201 method)
ErC50 (algae)	> 1000 mg/l (OECD 209 method)
NOEC (acute)	1000 mg/l (OECD 209 method)

12.2. Persistence and degradability

QUANTUM® PRIMUS EXTRA SHPD 20W50	
Persistence and degradability	Not readily biodegradable, according to appropriate OECD test due to properties of several components.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Not readily biodegradable, according to appropriate OECD test due to properties of several components.
Biodegradation	< 32 % (OECD 301B method)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Biodegradation	1.5 % (OECD 301B method)

phenol,dodecyl-, branched (121158-58-5)	
Chemical oxygen demand (COD)	10 g O2/l
Biodegradation	< 25 % (OECD 301D method)

12.3. Bioaccumulative potential

QUANTUM® PRIMUS EXTRA SHPD 20W50	
Bioaccumulative potential	Bioaccumulative potential.

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Log Kow	3.5 - 6 Moderately bioaccumulative

phenol,dodecyl-, branched (121158-58-5)	
Log Kow	7.14

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

QUANTUM® PRIMUS EXTRA SHPD 20W50
PBT: not relevant – no registration required
vPvB: not relevant – no registration required

Component	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	PBT: not relevant – no registration required vPvB: not relevant – no registration required

12.6. Other adverse effects

Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Avoid release to the environment.

European List of Waste (LoW) code : 13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not regulated

UN-No. (IMDG) : Not regulated

UN-No. (IATA) : Not regulated

UN-No. (ADN) : Not regulated

UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated

Proper Shipping Name (IMDG) : Not regulated

Proper Shipping Name (IATA) : Not regulated

Proper Shipping Name (ADN) : Not regulated

Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated

Packing group (IMDG) : Not regulated

Packing group (IATA) : Not regulated

Packing group (ADN) : Not regulated

Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	**QUANTUM® PRIMUS EXTRA SHPD 20W50** - Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts - Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts - phenol,dodecyl-, branched
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	**QUANTUM® PRIMUS EXTRA SHPD 20W50** - Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts - Bis(nonylfenyl)amine - phenol,dodecyl-, branched

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out
Distillates (petroleum), hydrotreated heavy paraffinic

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information : None.

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Expl. Not classified	Explosive Not classified
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product