72510 - TIDAL POWER SHPD 15W-40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 11/28/2014 Revision date: 4/17/2021 Supersedes version of: 8/17/2020 Version: 3.3

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

1.1. Product identifier

Product form : Mixture
Product name : 72510 - TIDAL POWER SHPD 15W-40
Product code : 72510

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

1.2.1. Relevant identified uses

Main use category : Consumer use,Industrial use,Professional use
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

North Sea Lubricants B.V. B.V.
Ampèrestraat 5
NL– 3846AN Harderwijk
The Netherlands
T +31 651345369
support@northsealubricants.com - www.northsealubricants.com

1.4. Emergency telephone number

Emergency number : +31 (0)786527652
Monday to Friday: 09:00 - 16:00 (CET)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

EUH-statements : EUH208 - Contains Molybdenum polysulphide long chain alkyl dithiocarbamate complex. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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; Baseoil substance with national workplace exposure limit(s) (BE, BG, CZ, DK, HR, NL, NO); substance with a Community workplace exposure limit	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	≥ 75	Asp. Tox. 1, H304
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	CAS-No.: 125643-61-0 EC-No.: 406-040-9 EC Index-No.: 607-530-00-7 REACH-no: 01-0000015551-76	1 – 5	Aquatic Chronic 4, H413
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based substance with a Community workplace exposure limit	CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889-13	1 – 2.5	Asp. Tox. 1, H304
Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726-33	0.5 – 2.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	CAS-No.: 36878-20-3 EC-No.: 253-249-4 REACH-no: 01-2119488911-28	0.1 – 2.5	Aquatic Chronic 4, H413 (M=0)
Molybdenum polysulphide long chain alkyl dithiocarbamate complex substance with a Community workplace exposure limit	EC-No.: 457-320-2 REACH-no: 01-0000019337-66	0.01 – 0.5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726-33	(6.25 ≤C < 100) Skin Irrit. 2, H315 (10 ≤C < 12.5) Eye Irrit. 2, H319 (12.5 ≤C < 100) Eye Dam. 1, H318

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of water/…. Wash contaminated clothing before reuse. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

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 after inhalation : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye irritation.

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 water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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. Wear personal protective equipment.

Handling temperature : ≤ 40 °C

Hygiene measures : 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

Storage conditions : Store in a well-ventilated place. Keep cool.

Storage temperature : ≤ 40 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³
IOEL STEL	10 mg/m³

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³
IOEL STEL	10 mg/m³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

No additional information available

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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	:	Not available
Melting point	:	Not applicable
Freezing point	:	-30 °C
Boiling point	:	Not available
Flammability	:	Not applicable
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	> 215 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	106 mm²/s @40°C
Solubility	:	insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	879.3 kg/m³ @15°C
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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).

10.5. Incompatible materials

No additional information available

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 hazard classes as defined in Regulation (EC) No 1272/2008

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

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rabbit)	> 5000 mg/kg
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5.53 mg/l/4h

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LD50 oral (rat)	> 2000 mg/kg
LD50 dermal (rat)	> 2000 mg/kg

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate) (93819-94-4)	
LD50 oral (rat)	2600 mg/kg bw/day
LD50 dermal (rabbit)	> 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rat)	> 2000 mg/kg

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight

Aspiration hazard : Not classified

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Viscosity, kinematic	106 mm²/s @40°C

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss
NOEC chronic crustacea	10 mg/l Daphnia magna
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LC50 - Fish [1]	> 74 mg/l Danio rerio
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna
EC50 72h - Algae [1]	> 3 mg/l Desmodesmus subspicatus
NOEC (chronic)	≤ 0.01 mg/l Daphnia magna '21 d'

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate) (93819-94-4)	
LC50 - Fish [1]	4.5 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	5.4 mg/l Daphnia magna
ErC50 algae	2.1 mg/l Selenastrum capricornutum

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
LC50 - Fish [1]	> 100 mg/l Danio rerio
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Desmodesmus subspicatus
NOEC chronic algae	> 10 mg/l Desmodesmus subspicatus

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	
LC50 - Fish [1]	94.8 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	50 mg/l Daphnia magna
EC50 72h - Algae [1]	9.62 mg/l Pseudokirchneriella subcapitata
NOEC (chronic)	100 mg/l
NOEC chronic crustacea	100 mg/l Daphnia magna

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
Persistence and degradability	Not readily biodegradable.

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
Biodegradation	31 % 28 d OECD 301F

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Persistence and degradability	Not biodegradable.
Biodegradation	1 % 28D

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate) (93819-94-4)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1.5 % OECD-testrichtlijn 301 B

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	0 %

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	
Biodegradation	22.75 % 29 Days

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil (64742-54-7)	
Partition coefficient n-octanol/water (Log Kow)	> 4

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Bioconcentration factor (BCF REACH)	260 35 D, Oncorhynchus mykiss (regenboogforel)
Partition coefficient n-octanol/water (Log Pow)	9.2

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate) (93819-94-4)	
Partition coefficient n-octanol/water (Log Pow)	0.9 @23°C

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Bioconcentration factor (BCF REACH)	1584.89
Partition coefficient n-octanol/water (Log Pow)	> 7
Bioaccumulative potential	Bioaccumulative potential.

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	
BCF - Fish [1]	0.05 mg/l @25°C Cyprinus carpio (Karper)
Bioconcentration factor (BCF REACH)	88

12.4. Mobility in soil

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Ecology - soil	Adsorbs into the soil.

Zinc bis{O-(6-methylheptyl)} bis {O(sec-butyl)} bis dithiophosphate) (93819-94-4)	
Ecology - soil	Adsorbs into the soil.

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Ecology - soil	Adsorbs into the soil.

Molybdenum polysulphide long chain alkyl dithiocarbamate complex	
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants
Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
2.1	Adverse physicochemical, human health and environmental effects	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Hazard statements (CLP)	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	EUH-statements	Added	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after skin contact	Modified	
4.2	Symptoms/effects after skin contact	Removed	
6.1	Emergency procedures	Modified	
7.1	Hygiene measures	Modified	
7.1	Precautions for safe handling	Modified	

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains Molybdenum polysulphide long chain alkyl dithiocarbamate complex. May produce an allergic reaction.

Full text of H- and EUH-statements:	
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

Safety Data Sheet (SDS), EU

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.