Safety Data Sheet

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

Date of issue: 27/03/2012 Revision date: 21/11/2018 Supersedes: 20/08/2018 Version: 4.3

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

1.1. Product identifier

Product form : Mixture

Product name : WOLF VITALTECH 5W30 D1

Product code : 16115
Product group : Blend

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

1.2.1. Relevant identified uses

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

Industrial/Professional use spec : Non-dispersive use Used in closed systems

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

WOLF OIL CORPORATION N.V. Georges Gilliotstraat, 52 2620 Hemiksem - België

T 0032 (0)3 870 00 00 - F 0032 (0)3 870 00 99

info@wolfoil.com

1.4. Emergency telephone number

Emergency number : +32 14 58 45 45 (NL/EN/FR/DE)

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

No additional information available

2.2. Label elements

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

EUH-statements : EUH208 - Contains Alkyl alcohol triester with boric acid (H3BO3). May produce an allergic

reaction

EUH210 - Safety data sheet available on request

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Baseoil - unspecified	(CAS No) 64742-54-7 (EC no) 265-157-1 (EC index no) 649-467-00-8 (REACH-no) 01-2119484627-25	10 - 24,9	Asp. Tox. 1, H304
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	(CAS No) 36878-20-3 (EC no) 253-249-4 (REACH-no) 01-2119488911-28	1 - 1,49	Aquatic Chronic 4, H413

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zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)bis(phosphorodithioate)	(CAS No) 2215-35-2 (EC no) 218-679-9 (REACH-no) 01-2119953275-34	1 - 1,49	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Alkyl alcohol triester with boric acid (H3BO3)	(EC no) 806-750-2 (REACH-no) 01-21200079516-48	0,1 - 0,99	Skin Sens. 1B, H317
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	0,1 - 0,49	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits
zinc (O,O,O',O'-tetrakis(1,3- dimethylbuthyl)bis(phosphorodithioate)	(CAS No) 2215-35-2 (EC no) 218-679-9 (REACH-no) 01-2119953275-34	(10 <c 1,="" <="100)" dam.="" eye="" h318<="" td=""></c>
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	(6,25 = <c 100)="" 2,="" <="" h315<br="" irrit.="" skin="">(10 =<c 12,5)="" 2,="" <="" eye="" h319<br="" irrit.="">(12,5 =<c 1,="" 100)="" <="" dam.="" eye="" h318<="" td=""></c></c></c>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Not expected to require first aid measures. First-aid measures after skin contact : Wash skin with mild soap and water.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

Symptoms/injuries after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal

use.

Symptoms/injuries after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.

Symptoms/injuries after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal

use.

Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal

use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. Foam. Powder. Dry chemical product.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Impound and recover large spill by mixing it with inert granular solids.

Methods for cleaning up : Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.

Other information : Spill area may be slippery. Use suitable disposal containers.

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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually

required.

Handling temperature : < 40 °C

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : < 40 °C

Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : 5 mg/m3 for oil mists (TWA, 8h-workday) recommended, based upon the ACGIH TLV (Analysis

according to US NIOSH Method 5026, NIOSH Manual of Analytical Methods, 3rd Edition).

8.2. Exposure controls

Personal protective equipment:

Safety glasses. Gloves.

Hand protection:

Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Nitrile rubber (NBR) /

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.



Relative density



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : Oilv liquid. Colour Yellow-brown. Characteristic. Odour Odour threshold : No data available : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point No data available Freezing point : No data available Boiling point : No data available : > 200 °C @ ASTM D92 Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapour pressure No data available Relative vapour density at 20 °C No data available

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: No data available

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: 853 kg/m³ @15°C Density

Solubility : Slightly soluble, the product remains on the water surface.

Log Pow : No data available : 61 mm²/s @ 40°C Viscosity, kinematic Viscosity, dynamic : No data available Explosive properties : No data available Oxidising properties : No data available : No data available **Explosive limits**

Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

None under normal conditions.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal conditions.

Conditions to avoid 10.4.

No data available.

Incompatible materials

Strong oxidizers. acids. Bases.

Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity : Not classified

zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)bis(phosphorodithioate) (2215-35-2)		
LD50 oral rat		2230 mg/kg OECD 401
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified

erm cell mutagenicity Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified

exposure)

: Not classified Aspiration hazard

WOLF VITALTECH 5W30 D1	
Viscosity, kinematic	61 mm²/s @ 40°C

SECTION 12: Ecological information

Toxicity

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)		
LC50 fish 1	> 100 mg/l (Brachydanio rerio)	
EC50 Daphnia 1	> 100 mg/l (Daphnia magna)	
EC50 other aquatic organisms 2	> 1000 mg/l	
EC50 72h algae (1)	600 mg/l 3d - Chlorophyta	
zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)bis(phosphorodithioate) (2215-35-2)		

zinc (0,0,0 ,0 -tetrakis(1,3-dimetriyibutify)bis(priosprioroditiiloate) (2213-33-2)	
LC50 fish 1	4,5 mg/l @Oncorhynchus mykiss
LC50 fish 2	46 mg/l @Cyprinodon variegatus
EC50 Daphnia 1	23 mg/l

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zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)l	zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)bis(phosphorodithioate) (2215-35-2)		
EC50 72h algae (1)	21 mg/l		
NOEC (acute)	1,8 mg/l @Oncorhynchus mykiss		
NOEC chronic crustacea	0,4 mg/l		
Alkyl alcohol triester with boric acid (H3BO	3)		
LC50 fish 1	1,3 mg/l		
EC50 Daphnia 1	2,6 mg/l		
EC50 72h algae (1)	9 mg/l		
NOEC chronic crustacea	1,9 mg/l		
Phosphorodithioic acid, mixed O,O-bis(1,3-	dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
LC50 fish 1	4,5 mg/l Oncorhynchus mykiss		
LC50 fish 2	46 mg/l Cyprinodon varietagus		
EC50 Daphnia 1	23 mg/l		
EC50 Daphnia 2	0,8 mg/l @21d		
EC50 other aquatic organisms 2	10000 mg/l @0,1d - Chlorophyta		
EC50 72h algae (1)	21 mg/l @3d - Chlorophyta		
NOEC (acute)	1,8 mg/l @4d - Oncorhynchus mykiss		
NOEC (chronic)	10 mg/l @2d - Daphnia		
NOEC chronic fish	0,4 mg/l @21d - Daphnia		
NOEC chronic algae	10 mg/l @3d - Chlorophyta		

12.2. Persistence and degradability

WOLF VITALTECH 5W30 D1		
Persistence and degradability	Not soluble in water, so only minimally biodegradable.	
Reaction products of Benzeneamine, N-pheny	rl- with nonene (branched) (36878-20-3)	
Biodegradation	0 % @28d OECD TG 301 B	
zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)bis(phosphorodithioate) (2215-35-2)		
Biodegradation	1,5 % Sturm (28d)	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Biodegradation	1,5 % @28d - OECD TG 301 B	

12.3. Bioaccumulative potential

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)		
Bioconcentration factor (BCF REACH)	1584,89	
Log Kow	10,88	
zinc (O,O,O',O'-tetrakis(1,3-dimethylbuthyl)bis(phosphorodithioate) (2215-35-2)		
Bioconcentration factor (BCF REACH)	2,2 (0,1d)	
Log Kow	2,21 @20°C	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Log Kow	0.56 Measurements	

Log Kow 0,56 Measurer

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Additional information : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

14.1	_	UN	num	her

UN-No. (ADR) : Not applicable UN-No. (IMDG) : Not applicable UN-No. (IATA) : Not applicable

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UN-No. (ADN) : Not applicable UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

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

IMDG

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

IATA

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

ADN

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

RID

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

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

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

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. 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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

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Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex

4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: Baseoil - unspecified,Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts are listed

SZW-lijst van mutagene stoffen

: Baseoil - unspecified, Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr)

esters, zinc salts are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

: None of the components are listed

giftige stoffen - Ontwikkeling

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
TLV: Threshold Limit Value
ASTM: American Society for Testing and Materials
ADR: Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
ADNR: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
IMDG: International Maritime Dangerous Goods
ICAO: International Civil Aviation Organization
IATA: International Air Transport Association
STEL: Short Term Exposure Limit
LD50: median Lethal Dose for 50% of subjects
ATE: acute toxicity estimate
LC50: median Lethal Concentration for 50% of subjects
EC50: concentration producing 50% effect

Other information

: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, 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 the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Sensitisation — Skin, category 1B
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
H411	Toxic to aquatic life with long lasting effects

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H413	May cause long lasting harmful effects to aquatic life
EUH208	Contains . May produce an allergic reaction
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

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