Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010 Date of issue:19/10/2015 Revision date:24/01/2017 Supersedes:21/01/2016

	stance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: WOLF OFFICIALTECH 0W20 MS-V
Product code	: 65617
Product group	: Blend
1.2. Relevant identified uses of the subst	tance 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 of	lata 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 m	ixture
Classification according to Regulation (EC) N	o. 1272/2008 [CLP]
Not classified	
2.2. Label elements	
Labelling according to Regulation (EC) No. 12	72/2008 [CL P]
EUH-statements	: EUH210 - Safety data sheet available on request
	EUH208 - Contains C14-16-18 Alkylphenol. May produce an allergic reaction
Child-resistant fastening	: No
Tactile warning	: No
2.3. Other hazards	
No additional information available	
SECTION 3: Composition/information	n on ingredients
3.1. Substance	
Not applicable	
3.2. Mixture	

3.2.	Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Baseoil - unspecified	(CAS No) 72623-87-1 (EC no) 276-38-4 (EC index no) 649-483-00-5 (REACH-no) 01-2119474889-13	40 - 60	Asp. Tox. 1, H304

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Zinc bis[O-(-6-methylheptyl)] bis[O-(sec- butyl)]bis(dithiophosphate)	(EC no) 298-577-9 (REACH-no) 01-2119543726-33		100) Skin Irrit. 2, H315 .,5) Eye Irrit. 2, H319
Name	Product identifier	Specific concentration limits	
Specific concentration limits:			
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec- butyl)]bis(dithiophosphate)	(EC no) 298-577-9 (REACH-no) 01-2119543726-33	0,1 - 0,99	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Baseoil - unspecified	(CAS No) 72623-87-1 (EC no) 276-738-4 (REACH-no) 01-2119474889-13	1 - 2,49	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated heavy paraffinic	(CAS No) 64742-54-7 (EC no) 265-157-1 (REACH-no) 01-2119484627-25	1 - 2,49	Asp. Tox. 1, H304
Baseoil - unspecified	(CAS No) 72623-86-0 (EC no) 276-737-9 (EC index no) 649-482-00-X (REACH-no) 01-2119474878-16	1 - 2,49	Asp. Tox. 1, H304
C14-16-18 Alkylphenol	(REACH-no) 01-2119498288-19	1 - 2,49	Skin Sens. 1, H317 STOT RE 2, H373
Bis(nonylphenyl)amine	(CAS No) 36878-20-3 (EC no) 253-249-4 (REACH-no) 01-2119488911-28	1 - 2,49	Aquatic Chronic 4, H413
Baseoil - unspecified	(CAS No) 64742-54-7 (EC no) 265-157-1 (REACH-no) 01-2119484627-25	25 - 45	Asp. Tox. 1, H304

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 First-aid measures after skin contact	 Not expected to require first aid measures. Wash skin with mild soap and water. 		
First-aid measures after eye contact First-aid measures after ingestion	In case of eye contact, immediately rinse with clean water for 10-15 minutes.Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.		
4.2. Most important symptoms and eff	ects, 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 Symptoms/injuries after eye contact	 Not expected to present a significant skin hazard under anticipated conditions of normal use. 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.		
No additional information available	cal attention and special treatment needed		
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 s	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.		

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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 conta	inment 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.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storag	e
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, inc	luding 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/p	ersonal 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.



SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and	chemical properties	
Physical state	: Liquid	
Appearance	: Oily liquid.	
Colour	: Yellow-brown.	
Odour	: Characteristic.	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: šC	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: > 200 °C @ ASTM D92	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: No data available	

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Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 845 kg/m³ @15°C
Solubility	: Slightly soluble, the product remains on the water surface.
Log Pow	: No data available
Viscosity, kinematic	: 48 mm²/s @ 40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	

No additional information available

SECT	ION 10: Stability and reactivity			
10.1.	Reactivity			
None u	nder normal conditions.			
10.2.	Chemical stability			
Stable u	under normal conditions.			
10.3.	Possibility of hazardous reactions			
None u	None under normal conditions.			
10.4.	Conditions to avoid			
No data	available.			
10.5.	Incompatible materials			
Strong	oxidizers. acids. Bases.			
10.6.	Hazardous decomposition products			

None under normal conditions.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
Bis(nonylphenyl)amine (36878-20-3)		
LD50 oral rat	> 5000 mg/kg OECD 401	
LD50 dermal rat	> 2000 mg/kg OECD 402	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-buty	I)]bis(dithiophosphate)	
LD50 oral rat	2600 mg/kg 67/548/EEG annexe V	
LD50 dermal rat	> 3160 mg/kg OECD 402	
LC50 inhalation rat (mg/l)	> 2 mg/l 1h - OECD 403 - read across	
Baseoil - unspecified (64742-54-7)		
LD50 oral	> 5000 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	> 5 mg/l/4h	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
	Based on available data, the classification criteria are not met	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	
Baseoil - unspecified (64742-54-7)		
NOAEL (dermal, rat/rabbit)	> 2000 mg/kg bodyweight	
Specific target organ toxicity (repeated exposure)	: Not classified	
Baseoil - unspecified (64742-54-7)		
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight/day	
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Baseoil - unspecified (64742-54-7)	
NOAEL (subacute, oral, animal/male, 28 days)	> 220 mg/kg bodyweight
NOAEL (subchronic, oral, animal/male, 90 days)	> 980 mg/kg bodyweight
Aspiration hazard	: Not classified
WOLF OFFICIALTECH 0W20 MS-V	
Viscosity, kinematic	48 mm²/s @ 40°C

SECTION 12: Ecological information

12.1. Toxicity

Bis(nonylphenyl)amine (36878-20-3)		
LC50 fish 1	> 100 mg/l OECD 203 (Danio rerio @96h)	
EC50 Daphnia 1	> 100 mg/I OECD 202 (Daphnia magna)	
EC50 72h algae (1)	> 100 mg/I OECD 201 (Desmodesdus subspicatus)	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate)		
LC50 fish 1	4,5 mg/l OECD 203 (Oncorhynchys mykiss) 96h	
EC50 Daphnia 1	5,4 mg/l OECD 202 (Daphnia magna) 48h	
EC50 other aquatic organisms 1	2,1 mg/l OECD 201 (Selenastrum capricornutum) 48h	
Baseoil - unspecified (64742-54-7)		
LC50 fish 1	> 100 mg/l	

12.2. Persistence and degradability		
WOLF OFFICIALTECH 0W20 MS-V		
Persistence and degradability	Not soluble in water, so only minimally biodegradable.	
Bis(nonylphenyl)amine (36878-20-3)		
Persistence and degradability	Not readily biodegradable.	
Biodegradation	1 % @28d	
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate)		
Biodegradation	1,5 % OECD 301B 28d	
12.3. Bioaccumulative potential		
Bis(nonylphenyl)amine (36878-20-3)		
Log Pow	> 7,6	

LOGIOW	- 7,0
Bioaccumulative potential	Potential to bioaccumulate.
Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate)
Log Pow	0,9 @23°C
Baseoil - unspecified (64742-54-7)	
Bioaccumulative potential	No data available.
12.4. Mobility in soil	
Bis(nonylphenyl)amine (36878-20-3)	
Ecology - soil	Adsorbs into the soil.

Zinc k	Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate)	
Ecolo	gy - soil	Adsorbs into the soil.
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 number Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR)

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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	· Net applicable
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
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 : No
Marine pollutant 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 A	nnex II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory informati	ion
	I regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations	
Contains no REACH substances with Annex	
Contains no substance on the REACH candic	Jate list
Contains no REACH Annex XIV substances	

15.1.2. National regulations

Germany

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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	 Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate),Distillates (petroleum), hydrotreated heavy paraffinic ,Baseoil - unspecified are listed
SZW-lijst van mutagene stoffen	: Zinc bis[O-(-6-methylheptyl)] bis[O-(sec-butyl)]bis(dithiophosphate),Distillates (petroleum), hydrotreated heavy paraffinic ,Baseoil - unspecified 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 giftige stoffen – Ontwikkeling	: None of the components are listed
Denmark	
Classification remarks	: Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	: Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. **Chemical safety assessment**

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Indication of changes:

3.2 Composition/informa	
n on ingredients	natio Modified

bbreviatio	ons 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	
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Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, 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
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
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