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

1.1 Product identifier

Trade name

# LUKOIL AVANTGARDE

# AVANTGARDE EXTRA 15W-40, AVANTGARDE ULTRA 15W-40, AVANTGARDE M40, AVANTGARDE M30

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

Relevant identified uses of the substance or mixture Motor oil Uses advised against

No data available.

### **1.3** Details of the supplier of the safety data sheet

#### Address

LUKOIL Marine Lubricants DMCC c/o «LLK-INTERNATIONAL» 6, Malaya Yakimanka 119180 Moscow, Russia Telephone no. +7-495-627 44

Telephone no.+7-495-627 44 49Fax no.+7-495-627 40 20

#### Information provided by / telephone +7-495-627 44 49 (9:00 - 17:00)

Advice on Safety Data Sheet sdb\_info@umco.de

#### Supplier

#### Address

LUKOIL Marine Lubricants Germany GmbH Alsterufer 20 20354 Hamburg

Telephone no. +49 40 180 4220 0

### 1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

## **Classification information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

This product does not meet the classification criteria given in the Regulation (EC) No 1272/2008 (CLP).

# 2.2 Label elements

# Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

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#### Signal word

Hazard statement(s)

#### Hazard statements (EU)

EUH210 Safety data sheet available on request.

#### Precautionary statement(s)

#### Labelling information

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

#### 2.3 Other hazards

No data available.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not applicable. The product is not a substance.

#### 3.2 Mixtures

#### **Chemical characterization** Mixture (preparation)

#### **Hazardous ingredients**

No	Substance name		Additio	nal information	
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Concer	ntration	%
	REACH no				
1	zinc bis[O-(6-methy	<pre>/lheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)</pre>			
	93819-94-4	Aquatic Chronic 2; H411	<	2.50	%-b.w.
	298-577-9	Eye Dam. 1; H318			
	-	Skin Irrit. 2; H315			
	01-2119543726-33				

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Skin Irrit. 2; H315: C >= 6.25% Eye Irrit. 2; H319: C >= 10% Eye Dam. 1; H318: C >= 12.5%	-	-

# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### **General information**

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

#### After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Irregular breathing/no breathing: artificial respiration.

# After skin contact

Wash off immediately with soap and water.

#### After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

#### After ingestion

Do not induce vomiting. Call a doctor immediately. Never give anything by mouth to an unconscious person.



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No data available.

4.3 Indication of any immediate medical attention and special treatment needed No data available.

# **SECTION 5: Firefighting measures**

#### **Extinguishing media** 5.1

4.2

Suitable extinguishing media Foam; Extinguishing powder; Water spray jet; Carbon dioxide Unsuitable extinguishing media High power water jet

5.2 Special hazards arising from the substance or mixture In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO)

#### 5.3 Advice for firefighters

Cool endangered containers with water spray jet. Use self-contained breathing apparatus. Wear protective clothing.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

#### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up Prevent spread over a wide area (by containment with sand or earth). Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When picked up, treat material as prescribed under heading "Disposal considerations".

#### 64 Reference to other sections

No data available.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

#### Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin. Do not inhale vapours.

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed in a well-ventilated place. Protect from heat and direct sunlight. Keep in a cool place, heat causes increase in pressure and risk of bursting.

#### Requirements for storage rooms and vessels

Store product in closed containers. Storage rooms must be properly ventilated. Emptied containers may contain product residues and therefore must be handled with care. Reuse only after appropriate cleaning. Never use pressure to empty : container is not a pressure vessel.

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#### Advice on storage assembly

Do not store together with: oxidizing agents; Acids

# 7.3 Specific end use(s)

No data available.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **DNEL, DMEL and PNEC values**

**DNEL** values (worker)

No	Substance name				
	Route of exposure Exposure time Effect			Value	
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)				
	dermal	Long term (chronic)	systemic	0.58	mg/kg/day
	inhalative	Long term (chronic)	systemic	8.31	mg/m³

DNEL value (consumer)

No	Substance name	CAS / EC no			
	Route of exposure	Exposure time	Effect	Value	
1	zinc bis[O-(6-methylhepty	93819-94-4			
				298-577-9	
	oral	Long term (chronic)	systemic	0.24	mg/kg/day
	dermal	Long term (chronic)	systemic	0.29	mg/kg/day
	inhalative	Long term (chronic)	systemic	2.11	mg/m³

#### PNEC values

No	Substance name			
	ecological compartment	Туре	Value	
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec	-butyl)] bis(dithiophosphate)	93819-94-4 298-577-9	
	water	fresh water	4.00	µg/L
	water	marine water	4.60	µg/L
	water	Aqua intermittent	21.00	µg/L
	water	fresh water sediment	0.0116	mg/kg
	with reference to: dry weight			
	water	marine water sediment	0.00116	mg/kg
	with reference to: dry weight			
	soil	-	0.00528	mg/kg
	with reference to: dry weight			
	sewage treatment plant	-	100.00	mg/L
	secondary poisoning	-	10.67	mg/kg
	with reference to: food			

#### 8.2 Exposure controls

Appropriate engineering controls

No data available.

#### Personal protective equipment

#### **Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

#### Eye / face protection

Safety glasses with side protection shield (EN 166)



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Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material nitrile rubber

Other

Normal chemical work clothing. rubber boots

Environmental exposure controls

No data available.

**SECTION 9: Physical and chemical properties** 

### 9.1 Information on basic physical and chemical properties

Form/Colour				
liquid				
brownish yellow				
Odour				
specific				
Odour threshold				
No data available				
pH value		 		
No data available				
Boiling point / boiling range				
No data available				
Melting point / melting range				
No data available				
Decomposition point / decomposition rang	e			
No data available				
Flash point				
Value	>	100	°C	
Ignition temperature				
no data available				

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Auto-ignition temperature					
No data available					
Oxidising properties					
No data available					
Explosive properties					
No data available					
Flammability (solid, gas)					
No data available					
Lower flammability or explosive limits					
No data available					
Upper flammability or explosive limits					
No data available					
Vapour pressure					
No data available					
Vapour density No data available					
Evaporation rate No data available					
Relative density No data available					
Density	0.75		1 / 2		
Value Reference temperature	875	- 890 20	kg/m³ °C		
· · · · · · · · · · · · · · · · · · ·		20	U		
Solubility in water					
Comments	insoluble				
Solubility(ies)					
No data available					
Partition coefficient: n-octanol/water					
No Substance name		CAS no.		EC no.	
1 zinc bis[O-(6-methylheptyl)] bis[O-(se bis(dithiophosphate)	ec-butyl)]	93819-94-4		298-577-9	
log Pow	0.59		- 1.20		
Reference temperature			23	°C	
Method	OECD 107				
Source	ECHA				
Viscosity					
Value	75	- 105	mm²/s		
Reference temperature Type	kinematic	40	°C		
	Killemauc				

#### 9.2 Other information

Other information No data available.



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## **SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No data available.
- **10.2 Chemical stability** No data available.
- **10.3 Possibility of hazardous reactions** No data available.
- **10.4 Conditions to avoid** None known
- **10.5** Incompatible materials None known.
- **10.6 Hazardous decomposition products** No hazardous decomposition products known.

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acu	te oral toxicity				
No	Substance name		CAS no.		EC no.
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate)	outyl)]	93819-94-4		298-577-9
LD5	0			2600	mg/kg bodyweight
Spee		rat			
Sou	ce	ECHA			
Acu	te dermal toxicity				
No	Substance name		CAS no.		EC no.
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate)	outyl)]	93819-94-4		298-577-9
LD5	-	>		3160	mg/kg bodyweight
Spee		rabbit			
Meth		OECD 402			
Sou	ce	ECHA			
Acu	te inhalational toxicity				
No	lata available				
INO C					
	corrosion/irritation				
			CAS no.		EC no.
Skin	corrosion/irritation	outyl)]	CAS no. 93819-94-4		EC no. 298-577-9
Skin No 1	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b	putyl)]		4	
Skin No 1	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure	putyl)] rabbit		4	298-577-9
Skin No 1 Dura	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure cies	rabbit OECD 404		4	298-577-9
Skin No 1 Dura Spec	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure cies	rabbit		4	298-577-9
Skin No 1 Dura Spec Meth Sour	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure cies	rabbit OECD 404		4	298-577-9
Skin No 1 Dura Spec Meth Sour Eval	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) attion of exposure cies hod rce	rabbit OECD 404 ECHA		4	298-577-9
Skin No 1 Dura Spec Meth Sour Eval	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure cies hod cce uation	rabbit OECD 404 ECHA		4	298-577-9
Skin No 1 Dura Spec Meth Sour Eval	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure cies nod cce uation ous eye damage/irritation	rabbit OECD 404 ECHA irritant	93819-94-4	4	<b>298-577-9</b> h
Skin No 1 Dura Spec Meth Sour Eval Seri No	corrosion/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate) ation of exposure cies hod cce uation ous eye damage/irritation Substance name zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate)	rabbit OECD 404 ECHA irritant	93819-94-4 CAS no.	4	298-577-9 h EC no.
Skin No 1 Dura Spec Meth Sour Eval Seri No 1	corrosion/irritation         Substance name         zinc bis[O-(6-methylheptyl)] bis[O-(sec-b)         bis(dithiophosphate)         ation of exposure         cies         bod         cce         uation         ous eye damage/irritation         Substance name         zinc bis[O-(6-methylheptyl)] bis[O-(sec-b)         bis(dithiophosphate)         cies	rabbit OECD 404 ECHA irritant	93819-94-4 CAS no. 93819-94-4	4	298-577-9 h EC no.
Skin No 1 Dura Spec Meth Sour Eval Seri No 1 Spec	corrosion/irritation         Substance name         zinc bis[O-(6-methylheptyl)] bis[O-(sec-b)         bis(dithiophosphate)         ation of exposure         cies         bod         cce         uation         ous eye damage/irritation         Substance name         zinc bis[O-(6-methylheptyl)] bis[O-(sec-b)         bis(dithiophosphate)         cies         odd         cies         ous eye damage/irritation         Substance name         zinc bis[O-(6-methylheptyl)] bis[O-(sec-b)         bis(dithiophosphate)         cies         odd	rabbit OECD 404 ECHA irritant	93819-94-4 CAS no. 93819-94-4	4	298-577-9 h EC no.





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Dee	ningtony or akin consitiontion			
	piratory or skin sensitisation		040	<b>FO</b>
No	Substance name		CAS no.	EC no.
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate)	outyl)]	93819-94-4	298-577-9
Rou	te of exposure	Skin		
Spe	cies	guinea pig		
Met		OECD 406		
Sou	rce	ECHA		
Eva	luation	non-sensitizi	ng	
Ger	m cell mutagenicity			
No	Substance name		CAS no.	EC no.
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b	outvi)1	93819-94-4	298-577-9
	bis(dithiophosphate)			
Sou	rce	ECHA		
Eva	luation/classification	Based on av	ailable data, the classificat	tion criteria are not met.
			·	
	roduction toxicity			
No	Substance name		CAS no.	EC no.
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate)	outyl)]	93819-94-4	298-577-9
Sou	rce	ECHA		
Eva	luation/classification	Based on av	ailable data, the classificat	tion criteria are not met.
-		•	·	
	cinogenicity			
No	data available			
STC	OT - single exposure			
No	data available			
STC	OT - repeated exposure			
No	data available			
Acn	iration hazard			
	data available			
INO 0				
Dela	ayed and immediate effects as well as chro	onic effects f	rom short and long-term	exposure
	eated and prolonged skin contact may cause			
	tact with the product may cause slight irritatio			
	respiratory tract and the eyes.			

# SECTION 12: Ecological information

# 12.1 Toxicity

Toxi	Toxicity to fish (acute)						
No	Substance name	CAS no.		EC no.			
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b bis(dithiophosphate)	outyl)] 93819-94-	4	298-577-9			
LL50	)		4.5	mg/l			
Dura	ation of exposure		96	h			
Spec	cies	Oncorhynchus mykiss					
Meth	nod	OECD 203					
Sour	rce	ECHA					

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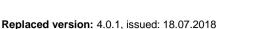
Toxicity to fish (chronic)

No data available Toxicity to Daphnia (acute) No Substance name CAS no. EC no. zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] 1 93819-94-4 298-577-9 bis(dithiophosphate) 5.4 EC50 mg/l Duration of exposure 48 h Species Daphnia magna Method **OECD 202 ECHA** Source Toxicity to Daphnia (chronic) No data available Toxicity to algae (acute) No Substance name CAS no. EC no. zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] 93819-94-4 298-577-9 1 bis(dithiophosphate) **EC50** 2.1 mg/l Duration of exposure 72 h Species Selenastrum capricornutum **OECD 201** Method **ECHA** Source Toxicity to algae (chronic) No data available **Bacteria toxicity** No data available 12.2 Persistence and degradability **Biodegradability** 

#### No Substance name CAS no. EC no. zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] 93819-94-4 298-577-9 1 bis(dithiophosphate) Туре aerobic biodegradation Value 1.5 % Duration 28 day(s) Method OECD 301 B ECHA Source Evaluation not readily biodegradable

#### 12.3 Bioaccumulative potential Dertition coefficients n

Part	ition coefficient: n-octanol/water					
No	Substance name		CAS no.		EC no.	
1	zinc bis[O-(6-methylheptyl)] bis[O-(sec-b	utyl)]	93819-94-4		298-577-9	
	bis(dithiophosphate)					
log F	Pow	0.59	-	1.20		
Refe	erence temperature			23	°C	
Meth	nod	OECD 107				
Sou	rce	ECHA				







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## 12.4 Mobility in soil

No data available.

#### **12.5 Results of PBT and vPvB assessment** No data available.

## **12.6 Other adverse effects**

No data available.

### 12.7 Other information

#### Other information

Do not discharge product unmonitored into the environment.

SECTION 13:	Disposal	considerations
	Diopodai	oonoraorationo

### 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

# **SECTION 14: Transport information**

#### 14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

#### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

#### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

#### 14.4 Other information

The product is not defined under national/international road, rail, sea and air dangerous goods transport regulations as a hazardous material:

national/international road - not restricted as per ADR national/international rail - not restricted as per RID national/international sea - not restricted as per IMDG national/international air - not restricted as per IATA

#### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

# **14.6** Special precautions for user No data available.

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not relevant

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#### **SECTION 15: Regulatory information**

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

#### Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

#### REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

# Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XVII of the REACH regulation (EC) 1907/2006.

**Directive 2012/18/EU** on the control of major-accident hazards involving dangerous substances This product is not subject to Part 1 or 2 of Annex I.

#### National regulations

#### National chemical inventories

listed
listed

#### 15.2 Chemical safety assessment

No data available.

#### **SECTION 16: Other information**

#### Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

# Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

#### Department issuing safety data sheet

#### UMCO GmbH

Georg-Wilhelm-Str. 187, D-21107 Hamburg Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.



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