

## LUKOIL AVANTGARDE PROFESSIONAL LE SAE 10W-40

Version	Revision Date:	Product code:	Date of last issue: -
1.0	31.01.2018	0253130737	Date of first issue: 31.01.2018
			Print Date: 31.01.2018

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

#### 1.1 Product identifier

Trade name : LUKOIL AVANTGARDE PROFESSIONAL LE SAE 10W-40  
Product code : 0253130737

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

Use of the Sub- : Engine oil  
stance/Mixture

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

Company : OOO «LLK-International»  
Malaya Yakimanka str. 6  
119180 Moscow  
Russian Fed.  
www.lukoil-lubricants.com

Address of manufacture:  
Promishlennaya str. 84  
614055 Perm  
Russian Fed.

Only representative:  
LUKOIL LUBRICANTS EAST EUROPE S.R.L.  
Tipografilor Str., A-2 building, GF 11-15  
013714 Bucharest  
Romania  
Telephone: +40 244 504 654  
Fax: +40 244 504 801

Telephone : +7 495 627-40-20  
Responsible/issuing person : info.product-safety@lukoil.com

#### 1.4 Emergency telephone number

Telephone : 24h/5d  
+7-800-1000-911

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**  
Not a hazardous substance or mixture.

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### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Precautionary statements : **Disposal:**  
P501

Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

#### Additional Labelling:

EUH210 Safety data sheet available on request.  
EUH208 Contains: C14-16-18 Alkyl phenol. May produce an allergic reaction.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  
None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Mixture  
Hydrocarbons  
Additives

#### Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
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. :			
distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7 265-157-1 01-2119484627-25		>= 40 - <= 60
distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7 265-157-1 01-2119484627-25	Asp. Tox.1; H304	>= 10 - < 20
paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7 265-174-4 01-2119487080-42		>= 5 - <= 15
bis(nonylphenyl)amine	36878-20-3	Aquatic Chronic4; H413	>= 1 - < 2,5

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	253-249-4 01-2119488911-28		
A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate	125643-61-0 01-0000015551-76	Aquatic Chronic4; H413	>= 1 - < 2,5
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	93819-94-4 298-577-9 01-2119543726-33	Aquatic Chronic2; H411	>= 1 - < 2,5
C14-16-18 Alkyl phenol	01-2119498288-19	Skin Sens.1B; H317 STOT RE2; H373	>= 0,1 - < 1

For explanation of abbreviations see section 16.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- General advice : Treat symptomatically.
- If inhaled : If breathed in, move person into fresh air.
- In case of skin contact : Wash off with warm water and soap.  
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
  
If eye irritation persists, consult a specialist.
- If swallowed : Do NOT induce vomiting.  
Obtain medical attention.

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

- Symptoms : Gastrointestinal discomfort  
Stomach/intestinal disorders  
Vomiting  
Pneumonia  
irritant effects
- Risks : May cause eye irritation.  
Risk of product entering the lungs on vomiting after ingestion.  
Aspiration may cause pulmonary oedema and pneumonitis.

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

- Treatment : Later control for pneumonia and lung oedema.

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : Dry powder  
Foam  
Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media : High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Vapours are heavier than air and may spread along floors.  
Vapours may form explosive mixtures with air.  
Cool closed containers exposed to fire with water spray.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Complete suit protecting against chemicals

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Avoid contact with skin, eyes and clothing.  
Ensure adequate ventilation, especially in confined areas.  
The danger areas must be delimited and identified using relevant warning and safety signs.  
Refer to section 15 for specific national regulation.

#### 6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage.  
Avoid subsoil penetration.  
Prevent product from entering drains.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with oil absorbent material.

#### 6.4 Reference to other sections

For personal protection see section 8.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

- Advice on safe handling : Take care to avoid waste and spillage when weighing, loading and mixing the product.  
Use only with adequate ventilation.  
Avoid formation of aerosol.  
Do not get on skin or clothing.  
Avoid inhalation, ingestion and contact with skin and eyes.
- Advice on protection against fire and explosion : To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.  
Vapours are heavier than air and may spread along floors.  
Vapours may form explosive mixtures with air.  
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.  
Take measures to prevent the build up of electrostatic charge.  
Keep away from heat and sources of ignition.  
Keep in a bunded area.  
Do not smoke.
- Hygiene measures : Take off all contaminated clothing immediately.  
  
General industrial hygiene practice.
- Fire-fighting class : Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.

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

- Requirements for storage areas and containers : Keep containers tightly closed in a cool, well-ventilated place.
- Further information on storage conditions : Keep away from heat and sources of ignition.
- Advice on common storage : Do not store together with explosives, gases, oxidizing solids, products which form flammable gases in contact with water, oxidizing products, infectious products and radioactive products.  
Do not store together with oxidizing and self-igniting products.  
Do not store together with explosives, oxidizing agents, organic peroxides and infectious products.  
Do not store together with acids and ammonium salts.
- Other data : Keep away from direct sunlight.

#### 7.3 Specific end use(s)

- Specific use(s) : For further information, refer to the product technical data

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sheet.

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

**8.1 Control parameters**

**Further occupational exposure limits**

Description	Value type	Control parameters	Basis
TWA - 8 h	TWA	5 mg/m <sup>3</sup>  (Mineral oils)	RU OEL

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate : End Use: Workers  
 Exposure routes: Skin contact  
 Potential health effects: Acute systemic effects  
 Value: 20 mg/kg  
 End Use: Workers  
 Exposure routes: Skin contact  
 Potential health effects: Acute local effects  
 Value: 1 mg/cm<sup>2</sup>  
 End Use: Workers  
 Exposure routes: Skin contact  
 Potential health effects: Long-term systemic effects  
 Value: 0,22 mg/kg  
 End Use: Workers  
 Exposure routes: Skin contact  
 Potential health effects: Long-term local effects  
 Value: 0,006 mg/cm<sup>2</sup>

zinc bis[O-(6-methylheptyl)]bis[O-(sec-butyl)]bis(dithiophosphate) : End Use: Workers  
 Exposure routes: Inhalation  
 Potential health effects: Long-term systemic effects  
 Value: 8,31 mg/m<sup>3</sup>  
 End Use: Consumers  
 Exposure routes: Ingestion  
 Potential health effects: Long-term systemic effects  
 Value: 0,24 mg/kg/day  
 End Use: Consumers  
 Exposure routes: Inhalation  
 Potential health effects: Long-term systemic effects  
 Value: 2,11 mg/m<sup>3</sup>

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate : Fresh water  
 Value: 0,0043 mg/l

Marine water  
 Value: 0,00043 mg/l  
 Fresh water sediment  
 Value: 233 mg/kg  
 Marine sediment

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	Value: 23,3 mg/kg
	Soil
	Value: 189 mg/kg
zinc bis[O-(6-methylheptyl)]	: Fresh water
bis[O-(sec-butyl)]	Value: 0,004 mg/l
bis(dithiophosphate)	
	Marine water
	Value: 0,0046 mg/l
	Intermittent use/release
	Value: 0,021 mg/l
	Fresh water sediment
	Value: 0,0116 mg/kg dry weight
	Marine sediment
	Value: 0,00116 mg/kg dry weight
	Soil
	Value: 0,00528 mg/kg dry weight
	Sewage treatment plant
	Value: 100 mg/l

**8.2 Exposure controls**

**Engineering measures**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

Eye protection : If splashes are likely to occur, wear:  
 Safety glasses with side-shields conforming to EN166

Hand protection

Material	: Nitrile rubber
Break through time	: 480 min
Glove thickness	: 0,40 mm
	Viton (R)
	480 min
	0,70 mm
	butyl-rubber
	120 min
	0,70 mm
	Neoprene
	60 min
	0,60 mm

Remarks : Protective gloves complying with EN 374.

This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us.  
 Take note of the information given by the producer concerning permeability and break through times, and of special work-place conditions (mechanical strain, duration of contact).  
 The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

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- Skin and body protection : Wear suitable protective equipment.
- Respiratory protection : Use respirator when performing operations involving potential exposure to vapour of the product.  
Respirator with filter type A  
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.  
Suitable respiratory equipment:  
  
Self-contained breathing apparatus (EN 133)
- Protective measures : Wear suitable protective equipment.  
Avoid contact with the skin and the eyes.  
Handle in accordance with good industrial hygiene and safety practice.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : tan
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- pour point : -37 °C
- : No data available
- Flash point : 231 °C  
Method: Cleveland open cup
- Evaporation rate : No data available
- Burning rate : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : No data available
- Vapour density : No data available
- Relative density : No data available
- Density : 0,856 g/cm<sup>3</sup> (20 °C)



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Bulk density	:	No data available
Water solubility	:	< 0,01 g/l (20 °C)
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	not determined
Auto-ignition temperature	:	364 °C
Ignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	86 mm <sup>2</sup> /s (40 °C)
Flow time	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

### 9.2 Other information

Self-heating substances	:	No data available
Impact sensitivity	:	No data available
Surface tension	:	No data available
	:	No data available
Molecular weight	:	No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product is chemically stable.

### 10.2 Chemical stability

The product is chemically stable.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

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Conditions to avoid : None known.

### 10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Product:

Acute oral toxicity : Based on available data, the classification criteria are not met.

Acute inhalation toxicity : Based on available data, the classification criteria are not met.

Acute dermal toxicity : Based on available data, the classification criteria are not met.

Acute toxicity (other routes of administration) : No data available

##### Components:

##### **distillates (petroleum), hydrotreated heavy paraffinic:**

Acute oral toxicity : LD50 Oral Rat: > 5.000 mg/kg  
Information given is based on data obtained from similar substances.

Acute inhalation toxicity : LC50 Rat: > 5,53 mg/l  
Exposure time: 4 h  
Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 Dermal Rat: > 2.000 mg/kg  
Information given is based on data obtained from similar substances.

##### **distillates (petroleum), hydrotreated heavy paraffinic:**

Acute oral toxicity : LD50 Oral Rat: > 5.000 mg/kg  
Information given is based on data obtained from similar substances.

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Acute inhalation toxicity : LC50 Rat: > 5,53 mg/l  
Exposure time: 4 h  
Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 Dermal Rabbit: > 2.000 mg/kg  
Information given is based on data obtained from similar substances.

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Acute oral toxicity : LD50 Rat: > 2.000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 Rat: > 2.000 mg/kg  
Method: OECD Test Guideline 402

**zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Acute oral toxicity : LD50 Rat: 2.600 mg/kg

Acute dermal toxicity : LD50 Rabbit: > 3.160 mg/kg  
Method: OECD Test Guideline 402  
Test substance: yes  
Based on available data, the classification criteria are not met.

### Skin corrosion/irritation

**Product:**

slight irritation  
Non persistent irritation  
Based on available data, the classification criteria are not met.

**Components:**

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Species: Rabbit  
Result: No skin irritation  
Method: OECD Test Guideline 404

**zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Classification: Causes skin irritation.  
Concentration limits  
Information given is based on data obtained from similar substances.  
Based on available data, the classification criteria are not met.

### Serious eye damage/eye irritation

**Product:**

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Non persistent irritation  
Based on available data, the classification criteria are not met.

### Components:

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

**zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Classification: Causes serious eye damage.

Concentration limits

Information given is based on data obtained from similar substances.

Based on available data, the classification criteria are not met.

### Respiratory or skin sensitisation

#### Product:

Exposure routes: Skin contact

Result: May cause sensitisation of susceptible persons.

Exposure routes: Inhalation

No known sensitising effect.

Based on available data, the classification criteria are not met.

### Components:

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Species: Guinea pig

Result: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

**zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Exposure routes: Skin contact

Species: Guinea pig

Classification: Does not cause skin sensitisation.

Result: negative

Method: OECD Test Guideline 406

### Germ cell mutagenicity

#### Product:

Genotoxicity in vitro : Based on available data, the classification criteria are not met.

Genotoxicity in vivo : Based on available data, the classification criteria are not met.

Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.

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### Components:

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

### Carcinogenicity

#### Product:

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

#### Components:

**distillates (petroleum), hydrotreated heavy paraffinic:**

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

**distillates (petroleum), hydrotreated heavy paraffinic:**

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Carcinogenicity - Assessment : No data available

### Reproductive toxicity

#### Product:

Effects on fertility : This information is not available.

Effects on foetal development : This information is not available.

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

#### Components:

**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Reproductive toxicity - Assessment : No data available

### STOT - single exposure

#### Product:

Based on available data, the classification criteria are not met.

### STOT - repeated exposure

#### Product:

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Based on available data, the classification criteria are not met.

### Repeated dose toxicity

**Product:**

This information is not available.

Repeated dose toxicity - Assessment : No data available

### Aspiration toxicity

**Product:**

No aspiration toxicity classification

**Components:**

**distillates (petroleum), hydrotreated heavy paraffinic:**

May be fatal if swallowed and enters airways.

### Further information

**Product:**

No data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

Toxicity to fish (Chronic toxicity) : No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : No data available

Ecotoxicology Assessment  
Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

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### Components:

#### **distillates (petroleum), hydrotreated heavy paraffinic:**

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 : > 10.000 mg/l

Toxicity to algae : NOEL (algae): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEL: 10 mg/l  
Species: Fish

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL: 10 mg/l

#### **distillates (petroleum), hydrotreated heavy paraffinic:**

Toxicity to fish : LL50 (Fish): > 100 mg/l  
Information given is based on data obtained from similar substances.

Toxicity to algae : NOEL (algae): > 100 mg/l  
Information given is based on data obtained from similar substances.

Toxicity to fish (Chronic toxicity) : NOEL: 10 mg/l  
Species: Fish

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL: 10 mg/l  
Information given is based on data obtained from similar substances.

#### **A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 74 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 24 h  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 3 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

#### **zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4,5 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Analytical monitoring: no  
Method: OECD Test Guideline 203

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Toxic to aquatic organisms.

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 5,4 mg/l  
Exposure time: 48 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 202  
Toxic to aquatic organisms.

Toxicity to algae : EbC50 (Selenastrum capricornutum (green algae)): 2,1 mg/l  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
Toxic to aquatic organisms.

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Result: Not readily biodegradable.

Physico-chemical removability : The product is insoluble and floats on water.  
May be separated mechanically in waste water plants.

Impact on Sewage Treatment : No data available

#### Components:

##### **distillates (petroleum), hydrotreated heavy paraffinic:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 30 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

##### **distillates (petroleum), hydrotreated heavy paraffinic:**

Biodegradability : Test Type: aerobic  
Biodegradation: 6 %  
Exposure time: 28 d

##### **A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Biodegradability : Result: Not biodegradable  
Method: OECD Test Guideline 301B

##### **zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Biodegradability : Test Type: aerobic  
Inoculum: activated sludge  
Concentration: 10 mg/l  
Result: Not readily biodegradable.  
Biodegradation: 1,5 %  
Exposure time: 28 d



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Method: OECD Test Guideline 301B  
Test substance: yes

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : not determined

#### Components:

##### **distillates (petroleum), hydrotreated heavy paraffinic:**

Partition coefficient: n-octanol/water : log Pow: ca. 3,9 - 6

##### **A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)  
Bioconcentration factor (BCF): 260  
Method: OECD Test Guideline 305

Partition coefficient: n-octanol/water : log Pow: 9,2

##### **zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Bioaccumulation : Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Partition coefficient: n-octanol/water : log Pow: 0,9 (23 °C)

### 12.4 Mobility in soil

#### Product:

Mobility : Should not be released into the environment.

#### Components:

##### **zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate):**

Stability in soil : Adsorbs on soil.

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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### 12.6 Other adverse effects

**Product:**

Additional ecological information : Should not be released into the environment.  
Do not let product enter drains.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.  
13 02 08\*

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
15 01 10\*

## SECTION 14: Transport information

### 14.1 UN number

ADR : Not dangerous goods  
RID : Not dangerous goods  
IMDG : Not dangerous goods  
IATA : Not dangerous goods  
ADN : Not dangerous goods

### 14.2 Proper shipping name

ADR : Not dangerous goods  
RID : Not dangerous goods  
IMDG : Not dangerous goods  
IATA : Not dangerous goods  
ADN : Not dangerous goods

### 14.3 Transport hazard class

ADR : Not dangerous goods  
RID : Not dangerous goods  
IMDG : Not dangerous goods  
IATA : Not dangerous goods  
ADN : Not dangerous goods

### 14.4 Packing group

ADR : Not dangerous goods  
RID : Not dangerous goods  
IMDG : Not dangerous goods  
IATA : Not dangerous goods

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Print Date: 31.01.2018

**ADN** : Not dangerous goods

### 14.5 Environmental hazards

**ADR** : Not dangerous goods  
**RID** : Not dangerous goods  
**IMDG** : Not dangerous goods  
**IATA** : Not dangerous goods  
**ADN** : Not dangerous goods

### 14.6 Special precautions for user

Remarks : not required

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds : not required under normal use

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
Not applicable

### 15.2 Chemical safety assessment

No data available

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## SECTION 16: Other information

### Full text of H-Statements

H304 : May be fatal if swallowed and enters airways.  
H317 : May cause an allergic skin reaction.  
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.

### Full text of other abbreviations

Aquatic Chronic : Chronic aquatic toxicity  
Asp. Tox. : Aspiration hazard  
Skin Sens. : Skin sensitisation  
STOT RE : Specific target organ toxicity - repeated exposure

## **LUKOIL AVANTGARDE PROFESSIONAL LE SAE 10W-40**

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### **Further information**

Other information : Changes since the last version are highlighted in the margin.  
This version replaces all previous versions.

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