

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

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

1.1 Product identifier

Trade name : LUKOIL AVANTGARDE SAE 20W-20
Product code : 567520

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 : Lukoil Lubricants Europe Oy
Ölhafen Lobau – Uferstr. 8
1220 Wien
Austria

Telephone : +43 (1) 205 222 - 8800
Responsible/issuing person : info.product-safety@lukoil.com

1.4 Emergency telephone number

Telephone : +43 (1) 205 222 – 8800
(5d/08:00 – 17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements	: H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	: P102	Keep out of reach of children.
	Prevention:	
	P273	Avoid release to the environment.
	Disposal:	
	P501	Dispose of contents/ container to an approved waste disposal plant.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

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. Material can create slippery conditions.

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 01-2119484627-25-0035		>= 30 - <= 50
paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7 265-174-4 01-2119487080-42-0004		>= 20 - <= 40
distillates (petroleum), solvent-refined hydrotreated heavy, hydrogenated	94733-08-1 305-588-5 01-2119527818-28-0000		>= 20 - <= 30
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457-79-4 270-608-0 01-2119493628-22	Aquatic Chronic2; H411	>= 1 - < 2,5
phenol, dodecyl-, branched	121158-58-5 310-154-3 01-2119513207-49	Eye Irrit.2; H319 Repr.2; H361f Skin Irrit.2; H315 Aquatic Acute1; H400 Aquatic Chronic1; H410	>= 0,1 - < 0,25

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	: First aider needs to protect himself.
If inhaled	: If breathed in, move person into fresh air. Move to fresh air in case of accidental inhalation of vapours.
In case of skin contact	: Wash skin thoroughly with soap and water or use recognized skin cleanser. If on clothes, remove clothes.
In case of eye contact	: Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Do NOT induce vomiting. Obtain medical attention. When symptoms persist or in all cases of doubt seek medical advice.

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.
-----------	--

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Dry powder Foam Carbon dioxide (CO ₂)
Unsuitable extinguishing media	: High volume water jet

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

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.
Extinguishing media - large fires Complete suit protecting against chemicals

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 : Keep people away from and upwind of spill/leak.
Use personal protective equipment.
First aider needs to protect himself.
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.
Do not contaminate water.
Prevent product from entering drains.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.
Soak up with oil absorbent material.
Offer surplus and non-recyclable solutions to a licensed disposal company.

6.4 Reference to other sections

For personal protection see section 8.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

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.
Avoid formation of aerosol.
Use only in area provided with appropriate exhaust ventilation.
Provide exhaust ventilation close to floor level.
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.
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 : Remove all contaminated clothing under the shower.
Wash contaminated clothing before re-use.
Do not get in eyes.
Avoid contact with skin and clothing.
- 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 tightly closed.
Keep in a well-ventilated place.
To prevent leaks or spillages from spreading, provide a suitable liquid retention system.
- 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

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

No data available

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Apply technical measures to comply with the occupational exposure limits.

Personal protective equipment

Eye protection : Wear the following personal protective equipment:
Safety glasses with side-shields conforming to EN166

Hand protection

Material	: Nitrile rubber
Break through time	: 480 min
Glove thickness	: 0,40 mm
Directive	: DIN EN 374
	Viton (R)
	480 min
	0,70 mm
	DIN EN 374
	butyl-rubber
	120 min
	0,70 mm
	DIN EN 374
	Neoprene
	60 min
	0,60 mm
	DIN EN 374

Remarks : 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). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). The choice of an appropriate glove does not only depend on

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

its material but also on other quality features and is different from one producer to the other.

Skin and body protection : Flame retardant protective clothing
Workers should wear antistatic footwear.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
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	: light brown
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
pour point	: <= -30 °C Method: ISO 3016
	: No data available
Flash point	: >= 200 °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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

Vapour density	: No data available
Relative density	: No data available
Density	: 0,868 g/cm ³ (20 °C) Method: DIN 51757
Bulk density	: No data available
Water solubility	: < 0,01 g/l (20 °C, 1.013 mbar)
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: not determined
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: 42 mm ² /s (40 °C) Method: ASTM D 445
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

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is chemically stable.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Incompatible with strong acids and oxidizing agents.

10.4 Conditions to avoid

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 : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

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
Method: CONCAWE

Acute inhalation toxicity : LC50 Rat: > 5,53 mg/l
Exposure time: 4 h
Method: CONCAWE

Acute dermal toxicity : LD50 Dermal Rat: > 2.000 mg/kg

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

Method: CONCAWE

paraffin oils (petroleum), catalytic dewaxed heavy:

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

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

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

Skin corrosion/irritation

Product:

slight irritation
Non persistent irritation

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

Result: Mild skin irritation
Method: CONCAWE
Based on available data, the classification criteria are not met.

Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts:

Result: Skin irritation
Classification: Causes skin irritation.
Based on available data, the classification criteria are not met.
Concentration limits
SCL
European Chemicals Agency - ECHA

Serious eye damage/eye irritation

Product:

Non persistent irritation

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

Result: No eye irritation
Method: CONCAWE
Information given is based on data obtained from similar substances.

Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts:

Result: Eye irritation
Classification: Causes serious eye damage.
Based on available data, the classification criteria are not met.
Concentration limits
SCL
European Chemicals Agency - ECHA

Respiratory or skin sensitisation

Product:

No known sensitising effect.

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

Result: negative
Method: CONCAWE
Information given is based on data obtained from similar substances.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : No data available

Genotoxicity in vivo : No data available

Germ cell mutagenicity- Assessment : No data available

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

Genotoxicity in vivo : Test Type: Micronucleus test
Test species: Mouse
Method: CONCAWE
Result: negative

Carcinogenicity

Product:

This information is not available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

Carcinogenicity - Assessment : No data available

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)

paraffin oils (petroleum), catalytic dewaxed heavy:

Species: Mouse
Application Route: Skin contact
Method: CONCAWE
Result: negative

distillates (petroleum), solvent-refined hydrotreated heavy, hydrogenated:

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

Reproductive toxicity

Product:

Effects on fertility : This information is not available.

Effects on foetal development : This information is not available.

Reproductive toxicity - Assessment : No data available

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

Effects on foetal development : Application Route: Oral
Method: OECD Test Guideline 421
Result: negative
CONCAWE

STOT - single exposure

Product:

No data available

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

STOT - repeated exposure

Product:

No data available

Repeated dose toxicity

Product:

This information is not available.

Repeated dose toxicity - : No data available
Assessment

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

No observed adverse effect level: Rabbit: 1000 mg/kg
Application Route: Skin contact
Method: OECD Test Guideline 407

No observed adverse effect level: : > 0,28 mg/l
Application Route: Inhalation
(local)

No observed adverse effect level: : > 0,98 mg/l
Application Route: Inhalation
(systemic)

No observed adverse effect level: : > 2000 mg/kg
Application Route: Skin contact
Exposure time: 90 d
Subchronic toxicity

Aspiration toxicity

Product:

No data available

Components:

paraffin oils (petroleum), catalytic dewaxed heavy:

No data available

Further information

Product:

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

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	: Harmful to aquatic life with long lasting effects.
Toxicity Data on Soil	: No data available
Other organisms relevant to the environment	: No data available

Components:

distillates (petroleum), hydrotreated heavy paraffinic:

Toxicity to daphnia and other aquatic invertebrates	: EL50 (Daphnia magna (Water flea)): > 10.000 mg/l Exposure time: 48 h Method: CONCAWE
Toxicity to algae	: NOEL (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: CONCAWE

paraffin oils (petroleum), catalytic dewaxed heavy:

Toxicity to fish	: (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Test Type: LL50 Method: No information available.
Toxicity to daphnia and other aquatic invertebrates	: EL50 (Daphnia magna (Water flea)): > 10.000 mg/l Method: No information available. CONCAWE LL50 : > 10.000 mg/l Exposure time: 96 h Test Type: semi-static test

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

Method: No information available.
European Chemicals Agency - ECHA

NOEL : > 10.000 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: No information available.
European Chemicals Agency - ECHA

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: No information available.
CONCAWE

Toxicity to bacteria : NOEL (Photobacterium phosphoreum): > 1,93 mg/l
Exposure time: 4 d
Test Type: Respiration inhibition of activated sludge

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,02 mg/l
Species: Daphnia magna (Water flea)

distillates (petroleum), solvent-refined hydrotreated heavy, hydrogenated:

Toxicity to fish : (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: LL50
Method: CONCAWE

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): 10.000 mg/l
Exposure time: 48 h
Test Type: EL50
Method: CONCAWE

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: CONCAWE

Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts:

Toxicity to fish : LC50 : 46 mg/l
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 4,5 mg/l
Exposure time: 96 h

NOEC (Oncorhynchus mykiss (rainbow trout)): 1,8 mg/l
Exposure time: 96 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 23 mg/l
Exposure time: 48 h

NOEC (Daphnia (water flea)): 10 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (Scenedesmus quadricauda (Green algae)): 24 mg/l
Exposure time: 72 h

NOEC (Scenedesmus quadricauda (Green algae)): 1,8 mg/l
Exposure time: 72 h

Toxicity to bacteria : EC50 : > 10.000 mg/l
Exposure time: 0,1 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50: 0,8 mg/l
Exposure time: 21 d
Species: Daphnia (water flea)

EC50: 0,4 mg/l
Exposure time: 21 d
Species: Daphnia (water flea)

phenol, dodecyl-, branched:

Toxicity to fish : LC50 (Fat head minnow): 40 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 0,037 mg/l
Exposure time: 48 h

EC50 (Mysidopsis bahia (opossum shrimp)): > 0,58 mg/l
Exposure time: 96 h

Toxicity to algae : EC50 (green algae): 0,36 mg/l
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to bacteria : EC50 : > 1.000 mg/l
Exposure time: 0,1 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50: 0,0079 mg/l
Exposure time: 21 d
Species: Daphnia (water flea)

NOEC: 0,0037 mg/l
Exposure time: 21 d
Species: Daphnia (water flea)

M-Factor (Chronic aquatic toxicity) : 10

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

toxicity)

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:

paraffin oils (petroleum), catalytic dewaxed heavy:

Biodegradability : Result: not rapidly degradable

Stability in water : The product is insoluble and floats on water.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : not determined

Components:

phenol, dodecyl-, branched:

Bioaccumulation : Bioconcentration factor (BCF): 794,33

Partition coefficient: n-octanol/water : log Pow: 7,14

12.4 Mobility in soil

Product:

Mobility : Should not be released into the environment.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

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 05*
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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

IATA	: Not dangerous goods
ADN	: Not dangerous goods
Special Provisions	: Packed / Inland tanker

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 : This product is being carried under the scope of MARPOL Annex I

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 II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances
Not applicable

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

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H315	: Causes skin irritation.
H319	: Causes serious eye irritation.
H361f	: Suspected of damaging fertility.
H400	: Very toxic to aquatic life.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



LUKOIL AVANTGARDE SAE 20W-20

Version	Revision Date:	Product code:	Date of last issue: -
1.0	13.10.2016	567520	Date of first issue: 13.10.2016
			Print Date: 30.11.2016

H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute : Acute aquatic toxicity
Aquatic Chronic : Chronic aquatic toxicity
Eye Irrit. : Eye irritation
Repr. : Reproductive toxicity
Skin Irrit. : Skin irritation

Further information

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.