

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 23.08.2022 Revision date: 27.09.2023 Supersedes: 23.08.2022 Version: 2.0

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

1.1. Product identifier

Product form : Mixture

Product name : Eurol Geo-Max FE 5W-20

Product code : E100172
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use, professional use, Consumer use

Use of the substance/mixture : Lubricant

Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Eurol B.V. Energiestraat 12 NL-7442 DA Nijverdal The Netherlands Tel: +31 548 615 165

reach@eurol.com - www.eurol.com

1.4. Emergency telephone number

Emergency number : For Transport Emergency Call +31 6 26 71 27 43 (24hr/day 7days/week)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

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2.2. Label elements

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

Precautionary statements (CLP) : P102 - Keep out of reach of children.

EUH-statements : EUH208 - Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.

EUH210 - Safety data sheet available on request.

Child-resistant fastening : Not applicable Tactile warning : Not applicable

2.3. Other hazards

Other hazards not contributing to the classification

: This product floats on water and may affect the oxygen-balance in the water. The base oil contains less than 3% DMSO-extract measured according IP 346, therefore it is NOT classified as H350: May cause cancer" (Note L).". USED ENGINE OILS: Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.]	REACH-no: 01-2119474889- 13	≥ 50	Asp. Tox. 1, H304
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	CAS-No.: 125643-61-0 EC-No.: 406-040-9 EC Index-No.: 607-530-00-7 REACH-no: 01-0000015551-	3 – 5	Aquatic Chronic 4, H413

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.]	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25	1 – 3	Asp. Tox. 1, H304
Distillates (petroleum), solvent-dewaxed heavy paraffinic	CAS-No.: 64742-65-0 EC-No.: 265-169-7 REACH-no: 01-2119471299- 27	1 – 3	Asp. Tox. 1, H304
Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil— unspecified; [A complex comination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).]	CAS-No.: 64742-56-9 EC-No.: 265-159-2 EC Index-No.: 649-469-00-9 REACH-no: 01-2119480132- 48	1 – 3	Asp. Tox. 1, H304
Paraffin oils (petroleum), catalytic dewaxed heavy; Baseoil— unspecified; [A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).]	CAS-No.: 64742-70-7 EC-No.: 265-174-4 EC Index-No.: 649-477-00-2 REACH-no: 01-2119487080- 42	1 – 3	Asp. Tox. 1, H304
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726- 33	1 – 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
C14-16-18 Alkyl phenol	EC-No.: 931-468-2 REACH-no: 01-2119498288- 19	0,1 – 1	Skin Sens. 1B, H317 STOT RE 2, H373

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726- 33	(6,25 ≤ C ≤ 100) Skin Irrit. 2, H315 (10 < C ≤ 12,5) Eye Irrit. 2, H319 (12,5 < C ≤ 100) Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Seek medical attention if ill effect develops.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

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First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : At normal ambient temperatures this product will be unlikely to present an inhalation hazard

because of its low volatility. May be harmful by inhalation if exposure to vapour, mists or

fumes resulting from thermal decomposition products occurs.

Symptoms/effects after skin contact : Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated

exposure may lead to dermatitis. High pressure injection of product into the skin may lead to

local necrosis if the product is not surgically removed.

Symptoms/effects after eye contact : Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Symptoms/effects after ingestion : Bad taste. Unlikely to cause harm if accidentally swallowed in small doses, though larger

quantities may cause nausea and diarrhoea.

Symptoms/effects upon intravenous administration : Unknown.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustion generates: CO, CO2, POx, NOx, SOx, H2S. Metallic oxides.

Explosion hazard : Not expected to be a fire/explosion hazard under normal conditions of use.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection.

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

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Other information : Prevent fire fighting water from entering the environment. Sweep up and remove to a

suitable, clearly marked container for disposal in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Spill area may be slippery. Prevent soil and water pollution. Prevent entry to sewers and

public waters.

6.1.1. For non-emergency personnel

Protective equipment : When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of

splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. Use protective clothing.

: Ventilate spillage area.

6.1.2. For emergency responders

Emergency procedures

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

Emergency procedures : No specific measures are necessary.

6.2. Environmental precautions

Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

For containment : Large quantities: Contain large spillage with sand or earth.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous.

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and

promptly returned to a drum reconditioner or disposed of properly.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do no eat, drink or smoke when using this product. Always wash hands after handling the

product

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed and in well ventilated place.

Storage conditions : Store in a well-ventilated place. Keep cool.

Incompatible products : Reacts vigorously with strong oxidizers and acids.

Maximum storage period : 5 year Storage temperature : \leq 40 °C

Information on mixed storage : Keep away from : Oxidizing materials. Strong acids.

Storage area : Store at ambient temperature.

Special rules on packaging : Keep container tightly closed and dry.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Exposure-value for oil mist : 10 mg/m3 (15 min.) or 5 mg/m3 (8 hours).

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

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8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. In case of splash hazard: safety glasses. Eye protection should only be necessary where liquid could be splashed or sprayed.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Other skin protection

Materials for protective clothing:

PVC gloves. Neoprene or nitrile rubber gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

PVC gloves. Neoprene or nitrile rubber gloves.

Other information:

Do not put the product-soaked rags into the pockets of working clothes. Do not use cloths stained with the product to dry hands. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke during use. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour Green. Appearance Oily. Liquid. Odour characteristic. Odour threshold Not available Melting point Not applicable Freezing point Not available Boiling point : > 280 °C Flammability (solid, gas) : Non flammable. Lower explosive limit (LEL) : 0.6 vol % Upper explosive limit (UEL) · 7 vol %

Flash point : 226 °C ASTM D 92

Auto-ignition temperature : > 240 °C

Decomposition temperature : Not available
pH : Not available

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Viscosity, kinematic : 50 mm²/s at 40 °C, ASTM D 445

Solubility : insoluble in water.
Log Kow : Not available

Log Pow : > 3
Vapour Pressure 20°C : < 0,1 hPa
Vapour pressure at 50°C : Not available
Density : Not available
Relative density : Not available
Relative vapour density at 20°C : > 1 (air=1)
Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits : 0.6 - 7 vol %

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : < 0,1 VOC content : 0 %

Other properties : Gas/vapour heavier than air at 20°C

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Moisture. Overheating.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

CO, CO2, POx, NOx, SOx, H2S. Metallic oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.] (72623-87-1)

LD50 oral rat > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

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reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)]	bis(dithiophosphate) (93819-94-4)	
LD50 oral rat	2600 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:	
LD50 dermal rabbit	> 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:	
LC50 Inhalation - Rat	> 2 mg/l (OECD 403 method)	
obtained by treating a petroleum fraction with carbon numbers predominantly in the range of	raffinic; Baseoil— unspecified; [A complex combination of hydrocarbons hydrogen in the presence of a catalyst. It consists of hydrocarbons having of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F roportion of saturated hydrocarbons.] (64742-54-7)	
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 Inhalation - Rat	> 5,53 mg/l	
Serious eye damage/irritation : Respiratory or skin sensitisation : Germ cell mutagenicity : Carcinogenicity :	Not classified	
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)]		
NOAEL (animal/male, F0/P)	160 mg/kg (OECD 422 method)	
NOAEL (animal/female, F0/P)	160 mg/kg (OECD 422 method)	
, ,	Not classified	
	Not classified	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.] (72623-87-1)		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0,98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)	
reaction mass of isomers of: C7-9-alkyl 3-(3,5	-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
NOAEL (oral, rat, 90 days)	5 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	
C14-16-18 Alkyl phenol		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)]	bis(dithiophosphate) (93819-94-4)	
LOAEL (dermal, rat/rabbit, 90 days)	≈ 70 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)	
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zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)		
	160 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	

Aspiration hazard : Not classified

Euro	Geo-l	Max	FE 5	W-20

Viscosity, kinematic 50 mm²/s at 40 °C, ASTM D 445

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.] (72623-87-1)

Viscosity, kinematic 10000 - 12000 mm²/s

Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil— unspecified; [A complex comination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-56-9)

Viscosity, kinematic 8,4 mm²/s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Other information

: Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products, Likely route of exposure: ingestion, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Ecology - water This product floats on water and may affect the oxygen-balance in the water.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term Not classified

(chronic)

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
LC50 fish 1 > 1000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
LC50 fish 2	> 2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 Daphnia 1	0,9 mg/l Test organisms (species): Daphnia magna	
EC50 Daphnia 2	> 1000 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 3 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
NOEC (chronic)	≤ 0,01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

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zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)		
LC50 fish 1 4,5 mg/l 96h; Oncorhynchus mykiss (Rainbow trout) ; (OECD 203 method)		
EC50 Daphnia 1	5,4 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	2,1 mg/l Test organisms (species): other:	
EC50 72h - Algae [2]	2 mg/l Test organisms (species): other:	
EC50 96h - Algae [1]	2,1 mg/l Test organisms (species): other:	
EC50 96h - Algae [2]	2 mg/l Test organisms (species): other:	
ErC50 (algae)	2,1 mg/l 96h; Selenastrum capricornutum	

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

LC50 fish 1	100 mg/l
EC50 Daphnia 1	10000 mg/l
EC50 72h - Algae [1]	> 100 mg/l

12.2. Persistence and degradability

Eurol Geo-Max FE 5W-20		
Persistence and degradability Not readily biodegradable.		
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)		
Biodegradation	1,5 % (OECD 301B method)	

12.3. Bioaccumulative potential

Eurol Geo-Max FE 5W-20		
Log Pow	> 3	
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.	

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.] (72623-87-1)

Log Pow	> 6	
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)		
Bioconcentration factor (BCF REACH) 260 (OECD 305 method)		
Log Pow	9,2	
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)		
Log Pow	0,9 @ 23°C	

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12.4. Mobility in soil

Eurol Geo-Max FE 5W-20	
0,	Not miscible with water. Spillages may penetrate the soil causing ground water contamination. This product floats on water and may affect the oxygen-balance in the water.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)

Product/Packaging disposal recommendations

Waste disposal recommendations

Additional information

Ecology - waste materials

: Disposal must be done according to official regulations.

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Dispose in a safe manner in accordance with local/national regulations. Do not discharge

into drains or the environment.

: Hazardous waste.

Every mixture with foreign substances such as solvents, brake- and cooling liquids is forbidden. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly. When not empty dispose of this container at hazardous or special waste collection point.

European List of Waste (LoW) code : 13 02 06* - Synthetic engine, gear and lubricating oils

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping	14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(b)	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating light vacuum gas oil, heavy vacuum gas oil and solvent deasphalted residual oil with hydrogen in the presence of a catalyst in a two stage process with dewaxing being carried out between the two stages. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of approximately 32cSt at 40 °C. It contains a relatively large proportion of saturated hydrocarbons.]; C14-16-18 Alkyl phenol; zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate); Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.]; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil— unspecified; [A complex comination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).]; Paraffin oils (petroleum), catalytic dewaxed heavy; Baseoil— unspecified; [A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).]	
3(c)	reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate; zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

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POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : 0 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out:

Paraffin oils (petroleum), catalytic dewaxed heavy; Baseoil— unspecified; [A complex combination of hydrocarbons obtained from a catalytic dewaxing process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).]

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Added	
	Revision date	Added	
	Flammability (solid, gas)	Added	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.3	Other hazards not contributing to the classification	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after eye contact	Modified	
5.1	Suitable extinguishing media	Modified	
5.2	Hazardous decomposition products in case of fire	Added	
5.3	Protection during firefighting	Modified	
6.1	Protective equipment	Modified	
6.1	Emergency procedures	Modified	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
6.3	Other information	Modified	

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Indication of changes			
Section	Changed item	Change	Comments
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Modified	
7.2	Storage conditions	Modified	
8.2	Environmental exposure controls	Modified	
8.2	Respiratory protection	Modified	
8.2	Hand protection	Modified	
8.2	Eye protection	Modified	
8.2	Appropriate engineering controls	Modified	
8.2	Skin and body protection	Modified	
9.1	Melting point	Added	
9.1	Flash point	Modified	
9.1	Upper explosive limit (UEL)	Added	
9.1	Lower explosive limit (LEL)	Added	
9.1	Viscosity, kinematic	Modified	
12.1	Ecology - general	Modified	
13.1	Product/Packaging disposal recommendations	Added	
15.1	REACH Annex XVII	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	Added	
16	Data sources	Added	
16	Other information	Added	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	

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Abbreviations and acronyms:		
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

: None.

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	
EUH208	Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.	
EUH210	Safety data sheet available on request.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, 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.	
H319	Causes serious eye irritation.	

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Full text of H- and EUH-statements:		
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.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1B	Skin sensitisation, category 1B	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

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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.