

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

1.1. Product identifier

Product form : Mixture
Product name : 77260 - Gas Engine Oil LA 40
Product code : 77260

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

Relevant identified uses

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Function or use category : Lubricants and additives

1.3. Details of the supplier of the safety data sheet

Transnational Blenders bv
Wieldrechtseweg 37
NL 3316 BG Dordrecht, Netherlands, Zuid Holland
Netherlands
T +31 (0)78 6527652
technical@tnb.nl, www.tnb.nl

1.4. Emergency telephone number

Country/Area	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)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard, H412
Category 3
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Signal word (CLP) : -

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.
P273 - Avoid release to the environment.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH208 - Contains Phenol, 2 (or 4)-C20-24-sec-alkyl derivatives, reaction products with distillation residues from manufacture of phenol (tetrapropenyl) derivatives and phenol

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

(tetrapropenyl) derivatives, carbon dioxide, calcium dihydroxide. May produce an allergic reaction.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Phenol, dodecyl-, branched (121158-58-5), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Phenol, dodecyl-, branched (121158-58-5), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are 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

Component	
Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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	Phenol, dodecyl-, branched (121158-58-5)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	≥ 90	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: 01-0000015551-76	$\geq 0.5 - < 3$	Aquatic Chronic 4, H413
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	CAS-No.: 68855-45-8 EC-No.: 701-249-4 REACH-no: 01-2119524018-47	$\geq 0.5 - < 3$	Aquatic Chronic 4, H413

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phenol, 2 (or 4)-C20-24-sec-alkyl derivatives, reaction products with distillation residues from manufacture of phenol (tetrapropenyl) derivatives and phenol (tetrapropenyl) derivatives, carbon dioxide, calcium dihydroxide	EC-No.: 944-406-4	≥ 0.3 – < 1	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) substance with national workplace exposure limit(s) (DE, SK)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	< 0.5	Eye Dam. 1, H318 Aquatic Chronic 2, H411
Phenol, dodecyl-, branched substance listed on REACH Candidate List (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)) substance identified as having endocrine disrupting properties	CAS-No.: 121158-58-5 EC-No.: 310-154-3 EC Index-No.: 604-092-00-9 REACH-no: 01-2119513207-49	< 0.3	Repr. 1B, H360F Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Phenol, 2 (or 4)-C20-24-sec-alkyl derivatives, reaction products with distillation residues from manufacture of phenol (tetrapropenyl) derivatives and phenol (tetrapropenyl) derivatives, carbon dioxide, calcium dihydroxide	EC-No.: 944-406-4	(9.83 ≤ C < 100) Skin Irrit. 2; H315
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	(50 < C ≤ 80) Eye Irrit. 2; H319 (80 < C ≤ 100) Eye Dam. 1; H318

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide 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), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

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	: If you feel unwell, seek medical advice.
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.
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.
Self protection of the first-aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after inhalation	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after skin contact	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after eye contact	: After adequate first aid, no further treatment is required unless symptoms reappear.

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after ingestion : After adequate first aid, no further treatment is required unless symptoms reappear.

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 water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire.
Firefighting instructions : Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid spilling the product, as this might cause falls. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
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.

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	: Do not 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	: Provide local exhaust or general room ventilation.
Storage conditions	: Keep cool. Protect from sunlight.
Storage temperature	: ≤ 40 °C
Storage area	: Store in a well-ventilated place. Store away from heat.
Special rules on packaging	: Keep only in original container. Store in a closed container.
Packaging materials	: Always store product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	5 mg/m ³
IOEL STEL	10 mg/m ³

Ireland - Occupational Exposure Limits

OEL TWA	5 ppm Form: inhalable fraction
---------	--------------------------------

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Use splash goggles when eye contact due to splashing is possible. Safety glasses

Eye protection

Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.35		EN ISO 374

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light brown.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -30 °C (ASTM D7346)
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 201 °C (ASTM D92)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 117.4 mm ² /s @ 40°C (ASTM D7042)
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 872 kg/m ³ @ 15°C (ASTM D4052)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LD50 oral (rat)	> 5000 mg/kg 401 Acute Oral Toxicity Test
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5 mg/l/4h 403 Acute Inhalation Toxicity Test

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 OECD Test Guideline 401
LD50 dermal (rat)	> 2000 mg/kg OECD Test Guideline 402

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

LD50 oral (rat)	3100 mg/kg bodyweight OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal (rabbit)	> 5000 mg/kg OECD Guideline 402 (Acute Dermal Toxicity)

Phenol, dodecyl-, branched (121158-58-5)

LD50 oral (rat)	2100 mg/kg (OECD 401)
LD50 dermal (rabbit)	≈ 15000 mg/kg (OECD 402)

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

LD50 oral (rat)	> 5000 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), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LC50 inhalation (rat) (mg/l)	> 1.67 mg/l (1h)

Skin corrosion/irritation : Not classified

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

pH	7 Source: ECHA Chem
----	---------------------

Serious eye damage/irritation : Not classified

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

pH	7 Source: ECHA Chem
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
----------------------------	---

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
----------------------------	---

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (dermal, rat/rabbit, 90 days)	≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified

77260 - Gas Engine Oil LA 40

Viscosity, kinematic	117.4 mm ² /s @ 40°C (ASTM D7042)
----------------------	--

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Viscosity, kinematic	20.8 mm ² /s @ 40°C
----------------------	--------------------------------

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Viscosity, kinematic	131.6 mm ² /s @40°C
----------------------	--------------------------------

Phenol, dodecyl-, branched (121158-58-5)

Viscosity, kinematic	450 mm ² /s @ 40°C (ASTM D445)
----------------------	---

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

Viscosity, kinematic	148 – 806 mm ² /s
----------------------	------------------------------

11.2. Information on other hazards

Endocrine disrupting properties

Component

Phenol, dodecyl-, branched (121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)
--	--

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term : Not classified
(acute)
Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.
(chronic)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l

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

LC50 - Fish [1]	> 100 mg/l Danio rerio
EC50 - Crustacea [1]	> 100 mg/l OECD 202-Daphnia Immob/Repro
EC50 72h - Algae [1]	> 3 mg/l Desmodesmus subspicatus (green algae) (OECD 201)
NOEC chronic fish	> 0.001 mg/l Danio rerio (36d)
NOEC chronic crustacea	> 1 mg/l Daphnia magna (21d)

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

LC50 - Fish [1]	4.4 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	75 mg/l Daphnia magna
EC50 72h - Algae [1]	410 mg/l Desmodesmus subspicatus
NOEC chronic crustacea	0.4 mg/l Daphnia magna (21d)
NOEC chronic algae	220 mg/l Scenedesmus quadricauda (72h)

Phenol, dodecyl-, branched (121158-58-5)

LC50 - Fish [1]	40 mg/l Pimephales promelas
EC50 - Crustacea [1]	0.037 mg/l Daphnia magna
EC50 72h - Algae [1]	0.36 mg/l Scenedesmus quadricauda
NOEC (chronic)	0.0037 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	0.0037 mg/l Daphnia magna (21d)

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

LC50 - Fish [1]	> 1000 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	> 1000 mg/l Daphnia magna
EC50 96h - Algae [1]	> 1000 mg/l Raphidocelis subcapitata
NOEC chronic algae	> 220 mg/l Raphidocelis subcapitata (96h)

Phenol, 2 (or 4)-C20-24-sec-alkyl derivatives, reaction products with distillation residues from manufacture of phenol (tetrapropenyl) derivatives and phenol (tetrapropenyl) derivatives, carbon dioxide, calcium dihydroxide

EC50 - Crustacea [1]	17 mg/l OECD 202
ErC50 algae	36 mg/l OECD 201

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.2. Persistence and degradability

77260 - Gas Engine Oil LA 40

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

Biodegradation	< 31 % OECD TG 301 F (28d)
----------------	----------------------------

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

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

Biodegradation	2 – 4 % OECD 301B
----------------	-------------------

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

Biodegradation	< 5 % OECD TG 301 D (28d)
----------------	---------------------------

Phenol, dodecyl-, branched (121158-58-5)

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

Biodegradation	25 % OECD TG 301 B (28d)
----------------	--------------------------

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

Biodegradation	13.4 % (28d)
----------------	--------------

Phenol, 2 (or 4)-C20-24-sec-alkyl derivatives, reaction products with distillation residues from manufacture of phenol (tetrapropenyl) derivatives and phenol (tetrapropenyl) derivatives, carbon dioxide, calcium dihydroxide

Persistence and degradability	Not readily biodegradable.
-------------------------------	----------------------------

12.3. Bioaccumulative potential

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 TG 305 (35d)
-------------------------------------	-----------------------

Partition coefficient n-octanol/water (Log Kow)	9.2
---	-----

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Partition coefficient n-octanol/water (Log Pow)	3.59
---	------

Phenol, dodecyl-, branched (121158-58-5)

Bioconcentration factor (BCF REACH)	794.33
-------------------------------------	--------

Partition coefficient n-octanol/water (Log Kow)	7.14
---	------

12.4. Mobility in soil

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

Ecology - soil	Adsorbs into the soil.
----------------	------------------------

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.46
--	------

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Phenol, dodecyl-, branched (121158-58-5)

Surface tension 42.2 mN/m @ 22°C (90%)

Organic Carbon Normalized Adsorption Coefficient (Log Koc) 4.4 – 4.67 OESO 121

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalyc dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

Ecology - soil Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Phenol, dodecyl-, branched (121158-58-5), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalyc dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8), Phenol, dodecyl-, branched (121158-58-5), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalyc dewaxed, light or heavy paraffinic C15-C50 (68855-45-8)

12.6. Endocrine disrupting properties

Component

Phenol, dodecyl-, branched (121158-58-5) The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
European List of Waste (LoW, EC 2000/532) : 13 02 05* - mineral-based non-chlorinated 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 name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
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				

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations $\geq 0.1\%$ or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

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)

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Explosives Precursors Regulation (EU 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 (EC 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)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
	Revision date	Modified
	Supersedes	Modified
3	Composition/information on ingredients	Modified
4.1	First-aid measures general	Added
4.1	First-aid measures for first aider	Added
5.2	Explosion hazard	Added
5.2	Fire hazard	Added
5.3	Firefighting instructions	Modified
6.1	Emergency procedures	Added
6.1	General measures	Modified
6.3	For containment	Modified
7.1	Additional hazards when processed	Added
7.1	Handling temperature	Removed
7.2	Packaging materials	Added
7.2	Storage conditions	Modified
9	Viscosity, kinematic	Modified
9	Freezing point	Modified
9	Flash point	Modified
9	Density	Modified
13.1	Regional waste regulation	Added
13.1	Additional information	Added
13.1	Sewage disposal recommendations	Added
13.1	Waste disposal recommendations	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

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:

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
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 disruptor

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

77260 - Gas Engine Oil LA 40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains Phenol, 2 (or 4)-C20-24-sec-alkyl derivatives, reaction products with distillation residues from manufacture of phenol (tetrapropenyl) derivatives and phenol (tetrapropenyl) derivatives, carbon dioxide, calcium dihydroxide. May produce an allergic reaction.

Safety Data Sheet (SDS), EU

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.