

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 04/01/2014 Revision date: 22/01/2024 Supersedes version of: 11/04/2023 Version: 2.4

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	45040 - ATF L8S
Product code	:	45040

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 Function or use category

: Industrial use, Professional use, Consumer use : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

77 Lubricants B.V. NL- 1761 JA The Netherlands T +31 (0)78 6527652 technical@77lubricants.nl - www.77lubricants.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

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.			

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2.3. Other hazards

Contains no PBT and/or 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 substance(s) are 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), C15-30, hydrotreated neutral oil-based substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FI, GR, HU, IE, LT, LV, NL, PL, PT, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878- 16	≥ 45 – < 55	Asp. Tox. 1, H304
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil substance with a Community workplace exposure limit	CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889- 13	≥ 25 – < 45	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077- 29	≥1-<3	Not classified
Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, 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	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25	≥1-<3	Not classified
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11- isoalkyloxy) derivs., C10-rich substance with a Community workplace exposure limit	CAS-No.: 398141-87-2 EC-No.: 800-172-4 REACH-no: 01-2119969520- 35	≥ 0.3 – < 3	Aquatic Chronic 2, H411
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	CAS-No.: 1218787-32-6 EC-No.: 620-540-6 REACH-no: 01-2119510877- 33	< 0.3	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Dimantine	CAS-No.: 124-28-7 EC-No.: 204-694-8 REACH-no: 01-2119486676- 20	< 0.3	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	EC-No.: 939-485-7 REACH-no: 01-2119974116- 35	< 0.1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	CAS-No.: 95-38-5 EC-No.: 202-414-9 REACH-no: 01-2119777867- 13	< 0.1	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

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 after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. 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 Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a water jet since it may cause the fire to spread.			
5.2. Special hazards arising from the subs	tance or mixture			
Hazardous decomposition products in case of fire	: Toxic fumes may be released.			
5.3. Advice for firefighters				
Precautionary measures fire Firefighting instructions Protection during firefighting	 Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. 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, pro	ective equipment and emergency procedures	
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6.1.1. For non-emergency personnel		
Protective equipment Emergency procedures	Wear recommended personal protective equipment.Ventilate spillage area.	
6.1.2. 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".	
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.		
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				
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes.			
Handling temperature	: ≤ 40 °C			
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	ng any incompatibilities			
Technical measures	: Provide local exhaust or general room ventilation.			
Storage conditions	: Store in a well-ventilated place. Keep cool.			
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.			
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

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA 5 mg/m ³	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1] 5 mg/m ³	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA 5 mg/m ³	

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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA [ppm]	50 ppm	
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m³	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
IOEL STEL	10 mg/m ³	

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

No additional information available

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.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

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Hand protection:

Protective gloves

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

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: amber. Yellow.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -45 °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
рН	: Not available
Viscosity, kinematic	: 27.2 mm²/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	: 844 kg/m³ @ 15°C (ASTM D4052)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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.

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Stable under normal conditions.

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 classifiedAcute toxicity (dermal): Not classifiedAcute toxicity (inhalation): Not classified		
Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)	
LD50 oral (rat)	> 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test	
LD50 dermal (rabbit)	> 2000 mg/kg 402 Acute Dermal Toxicity Test	
LC50 inhalation (rat) (mg/l)	> 5000 mg/l/4h	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test	
Lubricating oils (petroleum), C15-30, hydrotre	ated neutral oil-based (72623-86-0)	
LD50 oral (rat)	> 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test	
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-	isoalkyloxy) derivs., C10-rich (398141-87-2)	
LD50 oral (rat)	> 10000 mg/kg	
LD50 dermal (rabbit)	> 5000 mg/kg	
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)	
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)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test	
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)	
LD50 oral (rat)	1350 mg/kg OECD 401 Test	
LD50 dermal (rabbit)	> 2000 mg/kg	
LC50 inhalation (rat) (ppm)	220 ppm/1h	
Dimantine (124-28-7)		
LD50 oral (rat)	1230 mg/kg	
LD50 dermal (rabbit)	8000 mg/kg	

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3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine		
LD50 oral (rat)	500 – 2000 mg/kg 401 Acute Oral Toxicity Test	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)		
LD50 oral (rat)	1265 mg/kg bodyweight	
Lubricating oils (petroleum), C20-50, hydrotre	eated neutral oil (72623-87-1)	
LD50 oral (rat)	> 5000 mg/kg	
LD50 dermal (rabbit)	> 2000 mg/kg	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h	
Skin corrosion/irritation :	Not classified	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	l (95-38-5)	
рН	11.1	
Serious eye damage/irritation :	Not classified	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	l (95-38-5)	
рН	11.1	
Respiratory or skin sensitisation :	Not classified	
Germ cell mutagenicity :	Not classified	
Carcinogenicity :	Not classified	
Reproductive toxicity :	Not classified	
STOT-single exposure :	Not classified Not classified	
Distillates (petroleum), hydrotreated heavy pa		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408	
Lubricating oils (petroleum), C15-30, hydrotre	eated neutral oil-based (72623-86-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight	
Distillates (petroleum), hydrotreated light par	affinic (64742-55-8)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	l (95-38-5)	
NOAEL (oral, rat, 90 days)	20 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:	
STOT-repeated exposure	May cause damage to organs (gastro-intestinal tract, thymus) through prolonged or repeated exposure (oral).	
Lubricating oils (petroleum), C20-50, hydrotre	eated neutral oil (72623-87-1)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day	
Aspiration hazard :	Not classified	
45040 - ATF L8S		
Viscosity, kinematic	27.2 mm²/s @ 40°C (ASTM D7042)	
Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)	
Viscosity, kinematic	98 (98 – 108) mm²/s @40°C	
Lubricating oils (petroleum), C15-30, hydrotre	eated neutral oil-based (72623-86-0)	
Viscosity, kinematic	1.99 – 847 mm²/s 40°C	

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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)	
Viscosity, kinematic	4.263 – 24.46 mm²/s
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)
Viscosity, kinematic	< 20.5 mm²/s @40°C
Dimantine (124-28-7)	
Viscosity, kinematic	5.074 mm²/s
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
Viscosity, kinematic	35.85 mm²/s
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
Viscosity, kinematic	47 mm²/s
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : (acute)	Harmful to aquatic life with long lasting effects. Not classified Harmful to aquatic life with long lasting effects.
Distillates (petroleum), hydrotreated heavy pa	raffinic (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 Pseudokirchneriella subcapitat
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata (72h)
Lubricating oils (petroleum), C15-30, hydrotre	ated neutral oil-based (72623-86-0)
LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata (72h)
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)	
LC50 - Fish [1]	2.4 mg/l Oncorhynchus mykiss (Rainbow trout)
LC50 - Fish [2]	3.3 mg/l Cyprinodon variegatus
EC50 - Crustacea [1]	4.6 mg/l Daphnia magna
EC50 72h - Algae [1]	63 mg/l Scenedesmus quadricauda
NOEC chronic fish	1 mg/l
NOEC chronic crustacea	0.63 mg/l

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Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)		
NOEC chronic algae	0.313 mg/l Scenedesmus quadricauda (3d)	
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)		
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna	
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitat	
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)	
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)	
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata (72h)	
2,2'-(C16-18 (evennumbered, C18 unsaturated	l) alkyl imino) diethanol (1218787-32-6)	
LC50 - Fish [1]	0.1 mg/kg Brachydanio rerio	
EC50 - Crustacea [1]	0.043 mg/l Daphnia magna	
EC50 72h - Algae [1]	0.0538 mg/l Pseudokirchneriella subcapitata	
ErC50 algae	0.0538 mg/l	
NOEC chronic crustacea	0.0107 mg/l Daphnia magna (21d)	
NOEC chronic algae	0.0156 mg/l Pseudokirchneriella subcapitata (72h)	
Dimantine (124-28-7)		
LC50 - Fish [1]	0.26 mg/l Danio rerio	
EC50 - Crustacea [1]	0.0558 mg/l Daphnia magna	
EC50 72h - Algae [1]	0.0165 mg/l	
NOEC chronic crustacea	0.036 mg/l Daphnia magna (21d)	
NOEC chronic algae	0.00256 mg/l (72h)	
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amin	10	
LC50 - Fish [1]	2.14 mg/l Danio rerio	
EC50 - Crustacea [1]	1.05 mg/l	
EC50 72h - Algae [1]	0.0544 mg/l	
NOEC chronic crustacea	1.22 mg/l Daphnia magna (21d)	
NOEC chronic algae	0.0421 mg/l Raphidocelis subcapitata (72h)	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	l (95-38-5)	
LC50 - Fish [1]	0.33 mg/l Brachydanio rerio (zebra-fish)	
EC50 - Crustacea [1]	0.163 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	0.03 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
NOEC chronic algae	0.014 mg/l Desmodesmus subspicatus (72h)	
Lubricating oils (petroleum), C20-50, hydrotre	ated neutral oil (72623-87-1)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 Daphnia magna	
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)	
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)	

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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)		
NOEC chronic algae	100 mg/l Pseudokirchneriella subcapitata (72h)	
12.2. Persistence and degradability		
Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)	
Persistence and degradability	Not readily biodegradable.	
Biodegradation	31 % OECD TG 301 F (28d)	
Lubricating oils (petroleum), C15-30, hydrotre	eated neutral oil-based (72623-86-0)	
Persistence and degradability	Not readily biodegradable.	
Biodegradation	31 % 28 d OECD 301F	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-	isoalkyloxy) derivs., C10-rich (398141-87-2)	
Persistence and degradability	Not readily biodegradable.	
Biodegradation	9.6 % OECD TG 301 C (28d)	
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)	
Biodegradation	31 % OECD TG 301 F (28d)	
2,2'-(C16-18 (evennumbered, C18 unsaturated	l) alkyl imino) diethanol (1218787-32-6)	
Persistence and degradability	Biodegradable.	
Biodegradation	63 % OECD TG 301 D (28d)	
Dimantine (124-28-7)		
Persistence and degradability	Readily biodegradable.	
Biodegradation	68 % OECD 301D (28d)	
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amin	10	
Persistence and degradability	Biodegradable.	
Biodegradation	68 % OECD 301D	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	l (95-38-5)	
Persistence and degradability	Not readily biodegradable.	
Biodegradation	< 20 % OECD 301F (28d)	
Lubricating oils (petroleum), C20-50, hydrotre	ated neutral oil (72623-87-1)	
Biodegradation	31 %	
12.3. Bioaccumulative potential		
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-	isoalkyloxy) derivs., C10-rich (398141-87-2)	
Bioconcentration factor (BCF REACH)	27.54	
Partition coefficient n-octanol/water (Log Kow)	4.1	
Bioaccumulative potential	Bioaccumulative potential.	
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)		

Partition coefficient n-octanol/water (Log Pow)

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2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)		
BCF - Fish [1]	110.2 mg/l	
	• •	
Partition coefficient n-octanol/water (Log Kow)	3.6	
Dimantine (124-28-7)		
Partition coefficient n-octanol/water (Log Pow)	> 6.91	
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine		
Partition coefficient n-octanol/water (Log Pow)	-0.34 @25°C	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)		
Partition coefficient n-octanol/water (Log Kow) > 7		
12.4. Mobility in soil		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)		
Ecology - soil	Adsorbs into the soil.	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)		
Ecology - soil	Adsorbs into the soil.	
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

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW, EC 2000/532)	: 13 02 06* - synthetic engine, gear and lubricating oils
HP Code	: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause
	specific target organ toxicity either from a single or repeated exposure, or which cause
	acute toxic effects following aspiration.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.3. Transport hazard o	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 haz	ards	·		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport No data available

Rail transport No data available

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)

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 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)

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)

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)

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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

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
6.1	General measures	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	
ΙΑΤΑ	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	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	

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Abbreviations and acronyms:	
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

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
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	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H373	May cause damage to organs through prolonged or repeated exposure.	
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.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

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.