

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 05/07/2012 Revision date: 22/01/2024 Supersedes version of: 20/01/2023 Version: 5.1

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

1.1. Product identifier

Product form : Mixture

Product name : 43220 - ATF DX III

Product code : 43220

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

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

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]
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	≥ 55 – < 75	Not classified
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-	≥ 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-<5	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 – < 1	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
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
2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, arheptyl ar',ar"-Me derivs. substance with a Community workplace exposure limit	CAS-No.: 92257-31-3 EC-No.: 296-120-8 REACH-no: 01-2120753600- 62	< 0.1	Repr. 2, H361f STOT RE 2, H373 Aquatic Chronic 4, H413

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

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.

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

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of

normal use.

Symptoms/effects after skin contact : Prolonged or repeated skin contact with the material will remove natural oils which leads to

a dermatitis.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of

normal use.

Symptoms/effects upon intravenous administration : No data available.

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

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.

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.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

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

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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 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

2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl ar',ar"-Me derivs. (92257-31-3)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	0.14 mg/m³	
IOEL TWA [ppm]	0.008 ppm	
IOEL STEL	0.42 mg/m³	
IOEL STEL [ppm]	0.02 ppm	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m³	
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	

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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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA 5 mg/m³

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

Hand protection:

Breakthrough time: refer to the recommendations of the supplier

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	>0.35	3 (> 0.65)	EN ISO 374

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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 : red.
Odour : Not available

Odour threshold : Not available
Melting point : Not applicable
Freezing point : -52 °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 : 35 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 : 845 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.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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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

Acute toxicity (definal) Acute toxicity (inhalation)	Not classified	
2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]	-, ar-heptyl ar',ar''-Me derivs. (92257-31-3)	
LD50 oral (rat)	> 5000 mg/kg	
LD50 dermal (rabbit)	> 2000 mg/kg	
Distillates (petroleum), hydrotreated heavy p	araffinic (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	
Distillates (petroleum), hydrotreated light par	raffinic (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	
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	
Lubricating oils (petroleum), C15-30, hydrotreated 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	
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	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)		

Skin corrosion/irritation : Not classified

LD50 oral (rat)

1265 mg/kg bodyweight

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2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]	-, ar-heptyl ar',ar''-Me derivs. (92257-31-3)		
рН	5.93 @20°C		
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	ol (95-38-5)		
рН	11.1		
Serious eye damage/irritation :	Not classified		
2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]	-, ar-heptyl ar',ar''-Me derivs. (92257-31-3)		
рН	5.93 @20°C		
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethand	ol (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		
STOT-repeated exposure :	Not classified		
2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]	-, ar-heptyl ar',ar''-Me derivs. (92257-31-3)		
STOT-repeated exposure	May cause damage to organs (spleen, liver) through prolonged or repeated exposure (oral).		
Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408		
Distillates (petroleum), hydrotreated light par	raffinic (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)		
Lubricating oils (petroleum), C15-30, hydrotro	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight		
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanc	ol (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).		
Aspiration hazard :	Not classified		
43220 - ATF DX III			
Viscosity, kinematic	35 mm²/s @ 40°C (ASTM D7042)		
Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)		
Viscosity, kinematic	98 (98 – 108) mm²/s @40°C		
Distillates (petroleum), hydrotreated light par	raffinic (64742-55-8)		
Viscosity, kinematic	< 20.5 mm²/s @40°C		
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-	isoalkyloxy) derivs., C10-rich (398141-87-2)		
Viscosity, kinematic	4.263 – 24.46 mm²/s		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)			
Viscosity, kinematic	1.99 – 847 mm²/s 40°C		

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2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
Viscosity, kinematic	35.85 mm²/s

11.2. Information on other hazards

No additional information available

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)

(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 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)	
Distillates (petroleum), hydrotreated light par	affinic (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)	
NOEC chronic algae Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-		
<u> </u>		
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-	isoalkyloxy) derivs., C10-rich (398141-87-2)	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1]	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout)	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2]	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1]	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1]	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1] NOEC chronic fish	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda 1 mg/l	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1] NOEC chronic fish NOEC chronic crustacea	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda 1 mg/l 0.63 mg/l 0.313 mg/l Scenedesmus quadricauda (3d)	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1] NOEC chronic fish NOEC chronic crustacea NOEC chronic algae	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda 1 mg/l 0.63 mg/l 0.313 mg/l Scenedesmus quadricauda (3d)	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1] NOEC chronic fish NOEC chronic crustacea NOEC chronic algae Lubricating oils (petroleum), C15-30, hydrotre	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda 1 mg/l 0.63 mg/l 0.313 mg/l Scenedesmus quadricauda (3d)	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1] NOEC chronic fish NOEC chronic crustacea NOEC chronic algae Lubricating oils (petroleum), C15-30, hydrotre LC50 - Fish [1]	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda 1 mg/l 0.63 mg/l 0.313 mg/l Scenedesmus quadricauda (3d) eated neutral oil-based (72623-86-0) > 100 mg/l Pimephales promelas	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] EC50 72h - Algae [1] NOEC chronic fish NOEC chronic crustacea NOEC chronic algae Lubricating oils (petroleum), C15-30, hydrotre LC50 - Fish [1] EC50 - Crustacea [1]	isoalkyloxy) derivs., C10-rich (398141-87-2) 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) 3.3 mg/l Cyprinodon variegatus 4.6 mg/l Daphnia magna 63 mg/l Scenedesmus quadricauda 1 mg/l 0.63 mg/l 0.313 mg/l Scenedesmus quadricauda (3d) eated neutral oil-based (72623-86-0) > 100 mg/l Pimephales promelas > 10000 mg/l Daphnia magna	

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2,2'-(C16-18 (evennumbered, C18 unsaturated) 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)	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (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)	

12.2. Persistence and degradability

2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl ar',ar"-Me derivs. (92257-31-3)			
Persistence and degradability	Not readily biodegradable. May cause long-term adverse effects in the environment.		
Biodegradation	6 % 28d - OECD richtlijn 301 B		
Distillates (petroleum), hydrotreated heavy pa	Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % OECD TG 301 F (28d)		
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)		
Biodegradation	31 % OECD TG 301 F (28d)		
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-i	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)		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)			
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % 28 d OECD 301F		
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)			
Persistence and degradability	Biodegradable.		
Biodegradation	63 % OECD TG 301 D (28d)		
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)			
Persistence and degradability	Not readily biodegradable.		
Biodegradation	< 20 % OECD 301F (28d)		

12.3. Bioaccumulative potential

2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl ar',ar"-Me derivs. (92257-31-3)		
Partition coefficient n-octanol/water (Log Kow) ≥ 4		
Bioaccumulative potential	Not established.	

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Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Partition coefficient n-octanol/water (Log Pow) 3.9 – 6		
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)		
Partition coefficient n-octanol/water (Log Pow) > 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.	
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	
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

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)		
Ecology - soil Adsorbs into the soil.		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)		
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

HP Code

Product/Packaging disposal recommendations

European List of Waste (LoW, EC 2000/532)

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- 13 02 00 waste engine, gear and lubricating oils
- : 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.

SECTION 14: Transport information

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

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ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID nu	umber			
Not regulated for transport				
14.2. UN proper shipping	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard c	lass(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 haza	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
No supplementary information	·			

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)

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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)

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

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the Canadian NDSL (Non-Domestic Substances List)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

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	
13.1	European List of Waste (LoW, EC 2000/532)	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
РВТ	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

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
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
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.
H361f	Suspected of damaging fertility.
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.

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Full text of H- and EUH-statements:	
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 2	Reproductive toxicity, Category 2
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.