

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 06/09/2021 Revision date: 27/05/2024 Supersedes version of: 13/04/2023 Version: 2.1

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

1.1. Product identifier

Product form : Mixture

: 78930 - PSF Synth Product name

Product code 78930

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

1.2.1. Relevant identified uses

Intended for general public

: Industrial use, Professional use, Consumer use Main use category

: Lubricants and additives Function or use category

1.2.2. Uses advised against

technical@tnb.nl - www.tnb.nl

No additional information available

1.3. Details of the supplier of the safety data sheet

Transnational Blenders by Wieldrechtseweg, 37 NL- 3316 BG Dordrecht - Netherlands Zuid Holland Netherlands T+31 (0)78 6527652

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (inhalation:dust,mist) Category 4 H332 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 if inhaled. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

Contains : Dec-1-ene, dimers, hydrogenated

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Hazard statements (CLP) : H332 - Harmful if inhaled.

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.

 $\hbox{P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.}\\$

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

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]
Dec-1-ene, dimers, hydrogenated substance with national workplace exposure limit(s) (GB, NL)	EC-No.: 500-228-5 REACH-no: 01-2119537268- 33	≥ 55	Acute Tox. 4 (Inhalation:dust,mist), H332 Asp. Tox. 1, H304
Distillates (petroleum), solvent-dewaxed 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.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299- 27	≥1-<10	Not classified
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-	≥1-<5	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	≥ 0.3 – < 1	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, RO, 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	≥ 0.3 – < 1	Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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
Distillates (petroleum), solvent-refined heavy paraffinic substance with national workplace exposure limit(s) (BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH); substance with a Community workplace exposure limit	EC-No.: 265-090-8 EC Index-No.: 649-454-00-7 REACH-no: 01-2119488706-	≥ 0.1 – < 1	Not classified
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	CAS-No.: 61791-44-4 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
Hydrocarbons, C10-C13, aromatics, <1% naphthalene substance with national workplace exposure limit(s) (AT, BE, CZ, DK, ES, GB, IE, LV, NL, RO, SE, CH); substance with a Community workplace exposure limit	REACH-no: 01-2119451097- 39	< 0.1	Asp. Tox. 1, H304 Aquatic Chronic 2, H411 (M=0)
naphthalene substance with national workplace exposure limit(s) (AT, BE, DE, DK, ES, FI, FR, GB, HU, IE, IT, LV, NL, PL, RO, SE, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 91-20-3 EC-No.: 202-049-5 EC Index-No.: 601-052-00-2 REACH-no: 01-2119561346- 37	< 0.1	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 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 general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

doctor if you feel unwell.

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

No additional information 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.

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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. Avoid breathing dust, fume, gas, mist, spray, vapours.

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.

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 : Wear personal protective equipment. Avoid contact with skin and eyes. Ensure good

ventilation of the work station. Use only outdoors or in a well-ventilated area. Avoid

breathing dust, fume, gas, mist, spray, vapours.

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 : \leq 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

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Hydrocarbons, C10-C13, aromatics, <1% naph		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	5 mg/m³	
naphthalene (91-20-3)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Naphthalene	
IOEL TWA	50 mg/m³	
IOEL TWA [ppm]	10 ppm	
IOEL STEL	15 mg/m³	
Remark	(Year of adoption 2010)	
Regulatory reference	COMMISSION DIRECTIVE 91/322/EEC; SCOEL Recommendations	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	50 mg/m³	
OEL TWA [2]	10 ppm	
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)	
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	Form: Inhalable fraction	
OEL TWA [2]	5 ppm	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	5 mg/m³ Form: inhalable fraction Ireland. OELVs, Schedule 1 (Code of Practice for Chemical Agents Regulations), as amended (01 2020)	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)		
EU - Indicative Occupational Exposure Limit (IOEL)		
DEL TWA [ppm] 50 ppm		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
OEL TWA 5 mg/m³		
Ireland - Occupational Exposure Limits		
OEL TWA [2]	5 ppm Form: Inhalable fraction	

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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
IOEL STEL	10 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA [2]	5 ppm Form: inhalable fraction	
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³	
IOEL STEL	10 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA [2]	5 ppm Form: inhalable fraction	

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:

Use adequate ventilation to keep oil mist below applicable standard. Use splash goggles when eye contact due to splashing is possible. 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)	5 (> 240 minutes)	<0.35	3 (> 0.65)	EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

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 : Green.

Odour

Odour threshold : Not available

Melting point : Not applicable

Freezing point : -63 °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 : 21.5 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 : 829 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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10.2. Chemical stability

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. Strong acids.

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) : Harmful if inhaled.

Acute toxicity (inhalation)	Harmful if inhaled.			
78930 - PSF Synth				
ATE CLP (dust,mist)	2.154 mg/l/4h			
Hydrocarbons, C10-C13, aromatics, <1% nap	Hydrocarbons, C10-C13, aromatics, <1% naphthalene			
LD50 oral (rat)	> 6318 mg/kg OECD TG 401			
LD50 dermal (rat)	> 2000 mg/kg OECD TG 402			
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 4.778 mg/l/4h OECD TG 403			
naphthalene (91-20-3)				
LD50 oral (rat)	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)			
LC50 inhalation (rat) (mg/l)	> 0.4 mg/l air Animal: rat, Guideline: other:EPA TSCA, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)			
Distillates (petroleum), hydrotreated light par	Distillates (petroleum), hydrotreated light paraffinic (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			
Distillates (petroleum), hydrotreated heavy pa	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			
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2)				
LD50 oral (rat)	> 10000 mg/kg			
LD50 dermal (rabbit)	≥ 4000 – < 8000 mg/kg			

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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) (mg/l)	5.53 mg/l 403 Acute Inhalation Toxicity	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test	
2,2'-(C16-18 (evennumbered, C18 unsaturate	ed) alkyl imino) diethanol (61791-44-4)	
LD50 oral (rat)	≥ 300 – < 2000 mg/kg OECD 401 Test	
LD50 dermal (rabbit)	> 2000 mg/kg	
LC50 inhalation (rat) (mg/l)	≥ mg/l	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 0.6 mg/l/4h	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethan	nol (95-38-5)	
LD50 oral (rat)	1265 mg/kg bodyweight	
Distillates (petroleum), solvent-dewaxed hea	avy paraffinic (64742-65-0)	
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) (Vapours - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test	
Dec-1-ene, dimers, hydrogenated		
LD50 oral (rat)	2000 – 5000 mg/kg bodyweight	
LD50 dermal (rat)	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	900 – 5200 mg/l/4h	
Distillates (petroleum), solvent-refined heav	y paraffinic (64741-88-4)	
LD50 oral (rat)	> 5000 mg/kg	
LD50 dermal (rabbit)	> 2000 mg/kg	
LC50 inhalation (rat) (mg/l)	> 5000 mg/m³	
LC50 inhalation (rat) (Vapours - mg/l/4h)	5.53 mg/l/4h	
Skin corrosion/irritation	: Not classified	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethan	nol (95-38-5)	
рН	11.1	
Serious eye damage/irritation	: Not classified	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)		
рН	11.1	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity Reproductive toxicity	: Not classified : Not classified	
naphthalene (91-20-3)	. Not dissilled	
LOAEL (animal/female, F0/P)	50 mg/kg bodyweight OECD Guideline 414	
LOAEL (animal/female, F1)	450 mg/kg bodyweight OECD Guideline 414	
NOAEL (animal/female, F1/)	120 mg/kg bodyweight OECD Guideline 414	
STOT-single exposure	: Not classified	
2. C. Singio exposure	. Het didoomed	

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STOT-repeated exposure :	Not classified		
Hydrocarbons, C10-C13, aromatics, <1% naphthalene			
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight OECD Guideline 408		
NOAEL (subchronic, oral, animal/male, 90 days)	300 mg/kg bodyweight		
naphthalene (91-20-3)			
LOAEL (oral, rat, 90 days)	400 mg/kg bodyweight OECD 408		
LOAEC (inhalation, rat, vapour, 90 days)	0.011 mg/l air OECD Guideline 413		
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight OECD Guideline 411		
Distillates (petroleum), hydrotreated light para	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)		
Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)		
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		
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano	I (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).		
Distillates (petroleum), solvent-dewaxed heav	Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight		
Aspiration hazard : Not classified			
78930 - PSF Synth			
Viscosity, kinematic	21.5 mm²/s @ 40°C (ASTM D7042)		
Hydrocarbons, C10-C13, aromatics, <1% naph	nthalene		
Viscosity, kinematic	4.25 mm²/s		
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)		
Viscosity, kinematic	< 20.5 mm²/s @40°C		
Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)		
Viscosity, kinematic	≈ 98 mm²/s @ 40°C		
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-	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 2978 mm²/s 40°C			
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)			
Viscosity, kinematic	35.85 mm²/s		

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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
Viscosity, kinematic	150 (1.99 – 847) mm²/s @40°C	
Dec-1-ene, dimers, hydrogenated		
Viscosity, kinematic	5 mm²/s @40°C	
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)		
Viscosity, kinematic 28.51 mm²/s @40°C		

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)

 $\label{thm:long-term} \hbox{Hazardous to the aquatic environment, long-term} \qquad : \quad \hbox{Harmful to aquatic life with long lasting effects.}$

(chronic)

(chronic)		
Hydrocarbons, C10-C13, aromatics, <1% naphthalene		
LC50 - Fish [1]	3.6 mg/l Oncorhynchus mykiss (OECD 203)	
EC50 - Crustacea [1]	1.1 mg/l OECD 202	
ErC50 algae	3.8 mg/l 72h (Pseudokirchneriella subcapitata, OECD 201)	
NOEC chronic fish	0.103 mg/l 28 d (PETROTOX QSAR)	
NOEC chronic crustacea	0.179 mg/l 21 d (Daphnia magna, OECD 211)	
NOEC chronic algae	0.179 mg/l 72h (Pseudokirchneriella subcapitata, OECD 201)	
naphthalene (91-20-3)		
LC50 - Fish [1]	0.51 mg/l Oncorhynchus mykiss	
EC50 - Crustacea [1]	3.4 mg/l Daphnia magna	
NOEC (chronic)	0.59 mg/l (Daphnia pulex; 125 d)	
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)	
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)	

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Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)			
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		
NOEC chronic algae	0.313 mg/l Scenedesmus quadricauda (3d)		
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)		
2,2'-(C16-18 (evennumbered, C18 unsaturated	l) alkyl imino) diethanol (61791-44-4)		
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)		
Distillates (petroleum), solvent-dewaxed heav	Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
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)		
Dec-1-ene, dimers, hydrogenated			
LC50 - Fish [1]	1000 mg/l		
EC50 - Crustacea [1]	1000 mg/l		
EC50 72h - Algae [1]	1000 mg/l		

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Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
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)

12.2. Persistence and degradability

Hydrocarbons, C10-C13, aromatics, <1% naphthalene			
Persistence and degradability Readily biodegradable.			
Biodegradation	70 % 28d OECD 301F		
naphthalene (91-20-3)			
Persistence and degradability	Not readily biodegradable.		
Biodegradation	2 %		
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)		
Biodegradation	31 % OECD TG 301 F (28d)		
Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % OECD TG 301 F (28d)		
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, hydrotre	ated 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 (61791-44-4)		
Persistence and degradability	Biodegradable.		
Biodegradation	61 – 65 % 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)		
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
Biodegradation	31 % OECD 301F (28d)		
Dec-1-ene, dimers, hydrogenated			
Biodegradation	50 % 28 D		
Distillates (petroleum), solvent-refined heavy	paraffinic (64741-88-4)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % OECD 301F (28d)		

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12.3. Bioaccumulative potential

Hydrocarbons, C10-C13, aromatics, <1% naphthalene			
Bioconcentration factor (BCF REACH)	5780		
Partition coefficient n-octanol/water (Log Pow)	6.5		
naphthalene (91-20-3)			
Bioconcentration factor (BCF REACH)	< 100		
Partition coefficient n-octanol/water (Log Pow)	3.01		
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)		
Partition coefficient n-octanol/water (Log Pow)	> 6		
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-	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 (61791-44-4)			
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		
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
Bioconcentration factor (BCF REACH)	260		
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)			
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6		

12.4. Mobility in soil

Hydrocarbons, C10-C13, aromatics, <1% naphthalene		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.11 @ 20°C	
naphthalene (91-20-3)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.6	
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

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

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : 13 02 06* synthetic 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.

HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.

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
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 haz	ards			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
lo supplementary informatio	n 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

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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)

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	
10.5	Incompatible materials	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

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Abbreviations and acronyms:		
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 disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
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
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.

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Full text of H- and EUH-statements:		
H304	May be fatal if swallowed and enters airways.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H332	Harmful if inhaled.	
H351	Suspected of causing cancer.	
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. 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.