LUB005105 - Rymax Atexio VI

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 9/12/2017 Revision date: 4/11/2023 Supersedes version of: 1/19/2023 Version: 4.2

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

1.1. Product identifier

Product form : Mixture
Product name : LUB005105 - Rymax Atexio VI
Product code : LUB005105

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

Rymax Lubricants B.V.
Delweg, 8
NL– 6902 PJ Zevenaar – Netherlands
Netherlands
T tel: +31 (0) 316 740 856
info@rymax-lubricants.com - www.rymax-lubricants.com

1.4. Emergency telephone number

Emergency number : +31 (0) 316 740 856

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, Category 3 H412
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.

2.3. Other hazards

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lubricating oils (petroleum), 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 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

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
2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl 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

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

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.
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

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

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.

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 : Avoid contact with skin and eyes. Ensure good ventilation of the work station. Wear personal protective equipment.

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

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	5 mg/m³

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	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			
Type	**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:
Protective gloves

Hand protection					
Type	**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

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	:	-48 °C (ASTM D7346)
Boiling point	:	Not available
Flammability	:	Non flammable.
Explosive limits	:	Not available
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	:	28 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	:	843 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.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

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

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral (rat)	> 5000 mg/kg 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), C20-50, hydrotreated 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

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

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 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

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

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
LD50 oral (rat)	1265 mg/kg bodyweight

3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	
LD50 oral (rat)	500 – 2000 mg/kg 401 Acute Oral Toxicity Test

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

Skin corrosion/irritation : Not classified

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
pH	11.1

2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl ar',ar''-Me derivs. (92257-31-3)	
pH	5.93 @20°C

Serious eye damage/irritation : Not classified

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
pH	11.1

2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl ar',ar''-Me derivs. (92257-31-3)	
pH	5.93 @20°C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight

Distillates (petroleum), hydrotreated light paraffinic (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)ethanol (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).

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).

Aspiration hazard : Not classified

LUB005105 - Rymax Atexio VI	
Viscosity, kinematic	28 mm²/s @ 40°C (ASTM D7042)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Viscosity, kinematic	98 (98 – 108) mm²/s @40°C

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
Viscosity, kinematic	47 mm²/s

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)	
Viscosity, kinematic	1.99 – 847 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

Distillates (petroleum), hydrotreated light paraffinic (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

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 (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

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

Lubricating oils (petroleum), C20-50, hydrotreated 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)
NOEC chronic algae	100 mg/l Pseudokirchneriella subcapitata (72h)

Lubricating oils (petroleum), C15-30, hydrotreated 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
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
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) alkyl imino) diethanol (1218787-32-6)	
LC50 - Fish [1]	0.1 mg/l Danio 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)

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)

3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	
LC50 - Fish [1]	2.14 mg/l Danio rerio
EC50 72h - Algae [1]	0.0827 mg/l Raphidocelis subcapitata
NOEC chronic crustacea	0.738 mg/l Daphnia magna (21d)
NOEC chronic algae	0.0421 mg/l Raphidocelis subcapitata (72h)

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	< 60 % OECD 301F (28d)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
Biodegradation	31 %
Lubricating oils (petroleum), C15-30, hydrotreated 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 % 28 d OECD 301B
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Biodegradation	31 % OECD 301F (28d)
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)	
Persistence and degradability	Biodegradable.
Biodegradation	61 – 65 % (28d)
Dimantine (124-28-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	68 % 28D
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	< 20 % OECD TG 301 B (28d)
3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	
Persistence and degradability	Biodegradable.
Biodegradation	68 % OECD 301D
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

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)	> 6

2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)	
Bioconcentration factor (BCF REACH)	< 500
Partition coefficient n-octanol/water (Log Pow)	3.6

Dimantine (124-28-7)	
Partition coefficient n-octanol/water (Log Pow)	> 6.91

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
Partition coefficient n-octanol/water (Log Kow)	> 7

3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine	
Partition coefficient n-octanol/water (Log Pow)	-0.34 @25°C

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.

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.

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	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 hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

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**
	Supersedes	Modified	
	Revision date	Modified	
	Flammability (solid, gas)	Added	
1.2	Intended for general public	Added	
1.2	Function or use category	Added	
1.2	Main use category	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.1	Intended for general public	Added	
2.2	Precautionary statements (CLP)	Modified	
4.1	First-aid measures after skin contact	Added	
4.1	First-aid measures after inhalation	Added	
4.1	First-aid measures after ingestion	Added	
4.1	First-aid measures after eye contact	Added	
4.3	Other medical advice or treatment	Added	
5.1	Suitable extinguishing media	Added	
5.1	Unsuitable extinguishing media	Modified	
5.2	Hazardous decomposition products in case of fire	Added	
5.3	Protection during firefighting	Added	
5.3	Firefighting instructions	Added	
5.3	Precautionary measures fire	Added	
6.1	Protective equipment	Added	
6.1	Emergency procedures	Added	
6.1	Protective equipment	Added	
6.2	Environmental precautions	Added	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
6.3	Methods for cleaning up	Added	
6.3	Other information	Added	
6.3	For containment	Added	
6.4	Reference to other sections (8, 13)	Added	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Added	
7.1	Handling temperature	Added	
7.2	Storage conditions	Added	
7.2	Storage temperature	Modified	
7.2	Special rules on packaging	Added	
7.2	Storage area	Added	
7.2	Technical measures	Added	
8.2	Skin and body protection	Added	
8.2	Environmental exposure controls	Added	
8.2	Respiratory protection	Added	
8.2	Hand protection	Added	
8.2	Eye protection	Added	
8.2	Appropriate engineering controls	Added	
8.2	Personal protective equipment	Added	
9.1	Density	Modified	
9.1	Viscosity, kinematic	Modified	
10.1	Reactivity	Added	
10.2	Chemical stability	Added	
10.3	Possibility of hazardous reactions	Added	
10.4	Conditions to avoid	Added	
10.6	Hazardous decomposition products	Added	
12.1	Ecology - general	Added	
13.1	Waste treatment methods	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	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)

Abbreviations and acronyms:	
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine 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 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

Full text of H- and EUH-statements:	
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.
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. 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 RYMAX 2023

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.