

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

1.1. Product identifier

Product form : Mixture
Trade name : AREOL ATF D VI
Product code : AR108, AR162, AR163
Product group : Trade product

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
Use of the substance/mixture : Transmission oil
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

ATH&S GmbH
Bronninghauser str. 26 33729, Bielefeld, Germany
Tel. +49 (0)521/5535919
Tel. +49 (0)521/5535938
Tel. +49 (0)521/5535923
e-mail: info@ath-s.de

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|---|-----------------------------------|------------------|-----------------------------------|
| Belgium | Belgian Anti-Poison Centre | Bruynstraat 1 1120 Brussels | +32 70 245 245 | |
| United Kingdom | National Poisons Information Service (Cardiff Centre) University Hospital Llandough | Penlan Road CF64 2XX Llandough | 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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. 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.

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Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents/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 $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, 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

Comments : Highly refined mineral oils and additives.

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|-----------|---|
| Distillates (petroleum), hydrotreated light paraffinic (Note L) | CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077-29 | 25 – 50 | Asp. Tox. 1, H304 |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (Note L) | CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878-16 | 1 – 2,5 | Asp. Tox. 1, H304 |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | REACH-no: ACC-QT664993-91 (EU Confidential); ACN-AFT-25032021-PXL-01 (GB Confidential) | 1 – 2,5 | Eye Irrit. 2, H319 |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivatives, C10-rich | CAS-No.: 398141-87-2 EC-No.: 800-172-4 REACH-no: 01-2119969520-35 | 0,3 – 2,5 | Aquatic Chronic 2, H411 |
| Long-chain and very long-chain alkenyl succinimide | REACH-no: ACC-NN808816-16 (EU confidential) | 0,3 – 2,5 | Aquatic Chronic 4, H413 |
| Dimantine | CAS-No.: 124-28-7 EC-No.: 204-694-8 REACH-no: 01-2119486676-20 | < 0,3 | Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 |

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| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|-------|--|
| 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 |
| 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 |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits |
|---|--|-----------------------------------|
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | REACH-no: ACC-QT664993-91 (EU Confidential); ACN-AFT-25032021-PXL-01 (GB Confidential) | (75 ≤C < 100) Eye Irrit. 2, H319 |

Comments : The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3. 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 heavy water stream.

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5.2. Special hazards arising from the substance or mixture

| | |
|--|--|
| Fire hazard | : Combustible liquid. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| 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

| | |
|----------------------|----------------------------|
| 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

| | |
|-------------------------|---|
| 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 | : Provide good ventilation in process area to prevent formation of vapour. |
| Hygiene measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------|--|
| Storage conditions | : Keep container closed when not in use. Keep in a cool, well-ventilated place away from heat. |
| Storage temperature | : 0 – 40 °C |

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

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EU - Indicative Occupational Exposure Limit (IOEL)

Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended

5 mg/m³ - ACGIH TLV (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:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

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) | 6 (> 480 minutes) | ≥0.35 | | EN ISO 374 |

Other skin protection

Materials for protective clothing:

Wear suitable protective clothing

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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 | : characteristic. |
| Odour threshold | : Not available |
| Melting point | : Not applicable |
| Freezing point | : -48 °C - ASTM D5950 (pour point) |
| Boiling point | : Not available |
| Flammability | : Not applicable |
| Explosive properties | : Presents no particular fire or explosion hazard. |
| Explosive limits | : Not available |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : 212 °C - ASTM D92 (COC) |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : Not available |
| Viscosity, kinematic | : 29,6 mm ² /s (40 °C) - ASTM D7279 |
| Solubility | : Water: Insoluble / Slightly miscible |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50 °C | : Not available |
| Density | : 0,845 kg/l (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

VOC content : 0 %

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. Reacts violently with (strong) oxidizers.

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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

No decomposition if stored normally.

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

| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | |
|--|---|
| LD50 oral rat | 300 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other: |
| 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 |
| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 Inhalation - Rat (Dust/Mist) | 5,53 mg/l/4h |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivatives, C10-rich (398141-87-2) | |
| LD50 oral rat | 10 ml/kg |
| LD50 dermal rabbit | > 4000 mg/kg bodyweight |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| LD50 oral rat | > 5000 mg/kg (OECD 401 method) |
| LD50 dermal rabbit | > 2000 mg/kg (OECD 402 method) |
| LC50 Inhalation - Rat | > 5,53 mg/l (OECD 403 method) |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | |
| LD50 oral rat | > 2000 mg/kg |
| Long-chain and very long-chain alkenyl succinimide | |
| LD50 oral rat | > 1000 mg/kg |

Skin corrosion/irritation : Not classified

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| | |
|--|---|
| Dimantine (124-28-7) | |
| pH | 10,1 Temp.: 20 °C Concentration: 5 other: |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5) | |
| pH | 11,1 Remarks on result: 'other:' |
| Serious eye damage/irritation | : Not classified |
| Dimantine (124-28-7) | |
| pH | 10,1 Temp.: 20 °C Concentration: 5 other: |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5) | |
| pH | 11,1 Remarks on result: 'other:' |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Dimantine (124-28-7) | |
| NOAEL (chronic, oral, animal/male, 2 years) | 42,3 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other: |
| NOAEL (chronic, oral, animal/female, 2 years) | 52,6 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other: |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| 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 (digestive tract, thymus) through prolonged or repeated exposure (oral). |
| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Aspiration hazard | : Not classified |
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| Viscosity, kinematic | 29,6 mm ² /s (40 °C) - ASTM D7279 |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5) | |
| Viscosity, kinematic | 35,85 mm ² /s Temp.: '40°C' Parameter: 'm ² /sm2/s' |
| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
| Viscosity, kinematic | < 20,5 mm ² /s |
| Aliphatic, alicyclic or aromatic hydrocarbon | Yes |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| Viscosity, kinematic | < 20,5 mm ² /s (40 °C) - ASTM D7279 |
| Aliphatic, alicyclic or aromatic hydrocarbon | Yes |

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|--|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. 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. |
| Not rapidly degradable | |

| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | |
|---|--|
| LC50 - Fish [1] | 2,22 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| LC50 - Fish [2] | 2,14 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 - Crustacea [1] | 1,05 mg/l |
| EC50 - Other aquatic organisms [1] | 23,6 mg/l |
| ErC50 algae | 0,0544 mg/l |
| NOEC chronic crustacea | 0,738 mg/l |
| NOEC chronic algae | 0,0421 mg/l |
| Dimantine (124-28-7) | |
| LC50 - Fish [1] | 0,26 mg/l (96 h, Danio rerio) |
| EC50 - Crustacea [1] | 0,0558 mg/l (48 h, Daphnia magna) |
| EC50 72h - Algae [1] | 0,0165 mg/l (72 h, Algae) |
| LOEC (chronic) | 0,108 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0,036 mg/l (21 d, Daphnia, magna) |
| NOEC chronic crustacea | 0,00256 mg/l (72 h, Daphnia magna) |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5) | |
| LC50 - Fish [1] | 0,33 mg/l |
| EC50 - Crustacea [1] | 0,163 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [2] | 0,0169 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| ErC50 algae | 0,03 mg/l |
| NOEC chronic algae | 0,014 mg/l |
| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
| LC50 - Fish [1] | > 100 mg/l 96h |
| EC50 - Crustacea [1] | > 10000 mg/l |
| EC50 72h - Algae [1] | ≥ 100 mg/l |
| NOEC chronic crustacea | 10 mg/l 21d |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivatives, C10-rich (398141-87-2) | |
| LC50 - Fish [1] | 2,4 mg/l |
| EC50 - Crustacea [1] | 4,6 mg/l |
| EC50 72h - Algae [1] | 63 mg/l |
| NOEC chronic algae | 0,313 mg/l |

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| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
|--|--|
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 10000 mg/l |
| NOEC (acute) | ≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 211 method) |
| NOEC chronic fish | > 1000 mg/l |
| NOEC chronic crustacea | > 10 mg/l (Daphnia magna, 21d) (OECD 211 method) |
| NOEC chronic algae | ≥ 100 mg/l |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6) | |
| LC50 - Fish [1] | 0,1 mg/l |
| EC50 - Crustacea [1] | 0,043 mg/l |
| EC50 72h - Algae [1] | 0,0538 mg/l |
| ErC50 algae | 0,0538 mg/l |
| NOEC chronic crustacea | 0,0107 mg/l |
| NOEC chronic algae | 0,0156 mg/l |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | |
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 100 mg/l |
| ErC50 algae | > 100 mg/l |
| Long-chain and very long-chain alkenyl succinimide | |
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 100 mg/l |
| ErC50 algae | > 100 mg/l |
| NOEC chronic algae | 100 mg/l |

12.2. Persistence and degradability

| Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) | |
|--|-------------------------------|
| Persistence and degradability | Not established. |
| Biodegradation | 31 % (OECD 301F method) |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivatives, C10-rich (398141-87-2) | |
| Biodegradation | 9,6 % MITI 1 (28d) |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| Persistence and degradability | Not readily biodegradable. |
| Biodegradation | 31 % (28d) (OECD 301F method) |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6) | |
| Biodegradation | 63 % (28d) |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | |
| Biodegradation | 3,6 % |

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Long-chain and very long-chain alkenyl succinimide

| | |
|----------------|-----------|
| Biodegradation | 26 – 35 % |
|----------------|-----------|

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

| | |
|---|-----|
| Partition coefficient n-octanol/water (Log Pow) | > 6 |
|---|-----|

| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivatives, C10-rich (398141-87-2)

| | |
|-------------------------------------|------------|
| Bioconcentration factor (BCF REACH) | 1,4 (28 d) |
|-------------------------------------|------------|

| | |
|---|---------------------------------------|
| Partition coefficient n-octanol/water (Log Kow) | 4,1 octanol/water coefficient (0,1 d) |
|---|---------------------------------------|

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

| | |
|---|-----|
| Partition coefficient n-octanol/water (Log Kow) | > 6 |
|---|-----|

| | |
|---------------------------|----------------------------|
| Bioaccumulative potential | Bioaccumulative potential. |
|---------------------------|----------------------------|

Long-chain and very long-chain alkenyl succinimide

| | |
|---|----------|
| Partition coefficient n-octanol/water (Log Pow) | 17 – 492 |
|---|----------|

12.4. Mobility in soil

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

| | |
|----------------|---------------------|
| Ecology - soil | Insoluble in water. |
|----------------|---------------------|

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. |
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| European List of Waste (LoW) code | : 13 02 06* - synthetic engine, gear and lubricating oils |

SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|--------------------------------------|---------------|---------------|---------------|---------------|
| 14.1. UN number or ID number | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.2. UN proper shipping name | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

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| ADR | IMDG | IATA | ADN | RID |
|---|---------------|---------------|---------------|---------------|
| 14.3. Transport hazard class(es) | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.5. Environmental hazards | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| No supplementary information available | | | | |

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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)

| EU restriction list (REACH Annex XVII) | |
|--|--|
| Reference code | Applicable on |
| 3. | Distillates (petroleum), hydrotreated light paraffinic |
| 3(b) | Distillates (petroleum), hydrotreated light paraffinic |

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 0 %

Biocide Regulation (528/2012)

Child-resistant fastening : Not applicable

Tactile warning : Not applicable

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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 drug precursors)

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 | |
| 1.2 | Use of the substance/mixture | Added | |
| 1.2 | Function or use category | Added | |
| 1.2 | Intended for general public | Added | |
| 2.1 | Intended for general public | Added | |
| 2.2 | Precautionary statements (CLP) | Modified | |
| 4.1 | First-aid measures after ingestion | Modified | |
| 5.2 | Hazardous decomposition products in case of fire | Modified | |
| 10.3 | Possibility of hazardous reactions | Modified | |
| 16 | Abbreviations and acronyms | Modified | |

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) |

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Abbreviations and acronyms:

| | |
|---------|--|
| 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 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 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| 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. |
| H319 | Causes serious eye irritation. |
| 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. |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.