

Safety Data Sheet

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

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

1.1. Product identifier

| Product form | : | Mixture |
|--------------|---|-----------------|
| Product name | : | 45050 - ATF MBS |
| Product code | : | 45050 |

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

1.2.1. Relevant identified uses

Intended for general public Main use category Function or use category

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Hazardous to the aquatic environment - Chronic Hazard, H412 Category 3

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

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

2.2. Label elements

| Labelling according to Regulation (EC) N | No. 1272/2008 [CLP] |
|--|---|
| Signal word (CLP) | :- |
| Hazard statements (CLP) | : H412 - Harmful to aquatic life with long lasting effects. |
| Precautionary statements (CLP) | : P101 - If medical advice is needed, have product container or label at hand. |
| | P102 - Keep out of reach of children. |
| | P103 - Read carefully and follow all instructions. |
| | P273 - Avoid release to the environment. |
| | P501 - Dispose of contents and container to hazardous or special waste collection point, in |
| | accordance with local, regional, national and/or international regulation. |

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2.3. Other hazards

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|-------------|---|
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FI, GR, HU, IE, LT, LV, NL, PL, PT, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit | CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878- 16 | ≥ 45 – < 55 | Asp. Tox. 1, H304 |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil substance with a Community workplace exposure limit | CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889- 13 | ≥ 25 – < 45 | Asp. Tox. 1, H304 |
| Distillates (petroleum), hydrotreated light paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH); substance with a Community workplace exposure limit | CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077- 29 | ≥1-<3 | Not classified |
| Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit | CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25 | ≥1-<3 | Not classified |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11- isoalkyloxy) derivs., C10-rich substance with a Community workplace exposure limit | CAS-No.: 398141-87-2 EC-No.: 800-172-4 REACH-no: 01-2119969520- 35 | ≥ 0.3 – < 3 | Aquatic Chronic 2, H411 |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | CAS-No.: 1218787-32-6 EC-No.: 620-540-6 REACH-no: 01-2119510877- 33 | < 0.3 | Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 |
| Dimantine | CAS-No.: 124-28-7 EC-No.: 204-694-8 REACH-no: 01-2119486676- 20 | < 0.3 | Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 |

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

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

| SECTION 4: First aid measures | |
|--|--|
| 4.1. Description of first aid measures | |
| First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion | Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. Call a poison center or a doctor if you feel unwell. |
| 4.2. Most important symptoms and effe | ects, both acute and delayed |
| Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion | After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

| SECTION 5: Firefighting measures | |
|--|---|
| 5.1. Extinguishing media | |
| Suitable extinguishing media Unsuitable extinguishing media | Water spray. Dry powder. Foam. Carbon dioxide.Do not use a water jet since it may cause the fire to spread. |
| 5.2. Special hazards arising from the subs | tance or mixture |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |
| 5.3. Advice for firefighters | |
| Precautionary measures fire Firefighting instructions Protection during firefighting | Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

| SECTION 6: Accidental rele | ase measures |
|---------------------------------|---|
| 6.1. Personal precautions, prot | ective equipment and emergency procedures |
| | . Avoid exilier the preduct of this might cause falls |

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| 6.1.1. For non-emergency personnel | |
|--|--|
| Protective equipment Emergency procedures | Wear recommended personal protective equipment.Ventilate spillage area. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. For further information refer to section 8: "Exposure controls/personal protection". |
| 6.2. Environmental precautions | |
| Avoid release to the environment. | |

| 6.3. Methods and material for containment and cleaning up | | |
|---|--|--|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. | |
| Other information | : Dispose of materials or solid residues at an authorized site. | |
| 6.4. Reference to other sections | | |

For further information refer to section 13.

| SECTION 7: Handling and storage | ge |
|---------------------------------------|--|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. |
| Handling temperature | : ≤40 °C |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| 7.2. Conditions for safe storage, inc | luding any incompatibilities |
| Technical measures | : Provide local exhaust or general room ventilation. |
| Storage conditions | : Store in a well-ventilated place. Keep cool. |
| Storage temperature | : ≤40 °C |
| Storage area | : Store in a well-ventilated place. Store away from heat. |
| Special rules on packaging | : Keep only in original container. Store in a closed container. |
| 7.3. Specific end use(s) | |

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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

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

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

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



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

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

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

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Hand protection:

Protective gloves

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

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state Colour Odour Odour threshold | : Liquid : Blue. : Not available : Not available |
|--|---|
| Melting point Freezing point Boiling point Flammability Lower explosion limit | Not applicable -48 °C (ASTM D7346) Not available Non flammable. Not available |
| Upper explosion limit Flash point Auto-ignition temperature Decomposition temperature pH | Not available > 201 °C (ASTM D92) Not available Not available Not available Not available |
| Viscosity, kinematic Solubility Partition coefficient n-octanol/water (Log Kow) Vapour pressure Vapour pressure at 50°C Density | 27.1 mm²/s @ 40°C (ASTM D7042) insoluble in water. Not available Not available Not available 844 kg/m³ @ 15°C (ASTM D4052) |
| Relative density Relative vapour density at 20°C Particle characteristics | Not availableNot availableNot 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.

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

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| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | | |
|---|---|--|
| LD50 oral (rat) | 500 – 2000 mg/kg 401 Acute Oral Toxicity Test | |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5) | | |
| LD50 oral (rat) | 1265 mg/kg bodyweight | |
| Lubricating oils (petroleum), C20-50, hydrotre | eated neutral oil (72623-87-1) | |
| LD50 oral (rat) | > 5000 mg/kg | |
| LD50 dermal (rabbit) | > 2000 mg/kg | |
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5.53 mg/l/4h | |
| Skin corrosion/irritation : | Not classified | |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano | ıl (95-38-5) | |
| рН | 11.1 | |
| Serious eye damage/irritation : | Not classified | |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano | ıl (95-38-5) | |
| рН | 11.1 | |
| Respiratory or skin sensitisation : | Not classified | |
| Germ cell mutagenicity : | Not classified | |
| Carcinogenicity : | Not classified | |
| Reproductive toxicity : | Not classified Not classified | |
| STOT-single exposure : STOT-repeated exposure : | Not classified | |
| Distillates (petroleum), hydrotreated heavy pa | | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 | |
| Lubricating oils (petroleum), C15-30, hydrotre | | |
| | | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight | |
| Distillates (petroleum), hydrotreated light par | | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) | |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethano | ıl (95-38-5) | |
| NOAEL (oral, rat, 90 days) | 20 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other: | |
| STOT-repeated exposure | May cause damage to organs (gastro-intestinal tract, thymus) through prolonged or repeated exposure (oral). | |
| Lubricating oils (petroleum), C20-50, hydrotre | eated neutral oil (72623-87-1) | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day | |
| Aspiration hazard : | Not classified | |
| 45050 - ATF MBS | | |
| Viscosity, kinematic | 27.1 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), C15-30, hydrotreated neutral oil-based (72623-86-0) | | |
| Viscosity, kinematic | 1.99 – 847 mm²/s 40°C | |

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

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

| Hazardous to the aquatic environment, short-term : (acute) | Harmful to aquatic life with long lasting effects. Not classified Harmful to aquatic life with long lasting effects. |
|--|--|
| Distillates (petroleum), hydrotreated heavy pa | raffinic (64742-54-7) |
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 10000 mg/l Daphnia magna |
| EC50 72h - Algae [1] | > 100 mg/l Pseudokirchneriella subcapitat |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |
| NOEC chronic algae | ≥ 100 mg/l Pseudokirchneriella subcapitata (72h) |
| Lubricating oils (petroleum), C15-30, hydrotre | ated neutral oil-based (72623-86-0) |
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 10000 mg/l Daphnia magna |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |
| NOEC chronic algae | ≥ 100 mg/l Pseudokirchneriella subcapitata (72h) |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11- | isoalkyloxy) derivs., C10-rich (398141-87-2) |
| LC50 - Fish [1] | 2.4 mg/l Oncorhynchus mykiss (Rainbow trout) |
| LC50 - Fish [2] | 3.3 mg/l Cyprinodon variegatus |
| EC50 - Crustacea [1] | 4.6 mg/l Daphnia magna |
| EC50 72h - Algae [1] | 63 mg/l Scenedesmus quadricauda |
| NOEC chronic fish | 1 mg/l |
| NOEC chronic crustacea | 0.63 mg/l |
| | |

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

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

Partition coefficient n-octanol/water (Log Pow)

> 6

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| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6) | | |
|--|------------------------|--|
| BCF - Fish [1] | 110.2 mg/l | |
| Partition coefficient n-octanol/water (Log Kow) | 3.6 | |
| Dimantine (124-28-7) | | |
| Partition coefficient n-octanol/water (Log Pow) | > 6.91 | |
| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | | |
| Partition coefficient n-octanol/water (Log Pow) | -0.34 @25°C | |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5) | | |
| Partition coefficient n-octanol/water (Log Kow) | > 7 | |
| 12.4. Mobility in soil | | |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | | |
| Ecology - soil | Adsorbs into the soil. | |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich (398141-87-2) | | |
| Ecology - soil | Adsorbs into the soil. | |
| 12.5. Results of PBT and vPvB assessment | | |

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

SECTION 14: Transport information

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

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

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| ADR | IMDG | ΙΑΤΑ | ADN | RID |
|-----------------------------------|--|-----------------------------------|-----------------------------------|-----------------------------------|
| 14.3. Transport hazard o | class(es) | · | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental haz | ards | · | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No |

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport No data available

Rail transport No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes | | | |
|-----------------------|------------------|----------|----------|
| Section | Changed item | Change | Comments |
| | Revision date | Modified | |
| | Supersedes | Modified | |
| 6.1 | General measures | Added | |

| Abbreviations and acronyms: | | |
|-----------------------------|---|--|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways | |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road | |
| ATE | Acute Toxicity Estimate | |
| BCF | Bioconcentration factor | |
| BLV | Biological limit value | |
| BOD | Biochemical oxygen demand (BOD) | |
| COD | Chemical oxygen demand (COD) | |
| DMEL | Derived Minimal Effect level | |
| DNEL | Derived-No Effect Level | |
| EC-No. | European Community number | |
| EC50 | Median effective concentration | |
| EN | European Standard | |
| IARC | International Agency for Research on Cancer | |
| ΙΑΤΑ | International Air Transport Association | |
| IMDG | International Maritime Dangerous Goods | |
| LC50 | Median lethal concentration | |
| LD50 | Median lethal dose | |
| LOAEL | Lowest Observed Adverse Effect Level | |
| NOAEC | No-Observed Adverse Effect Concentration | |
| NOAEL | No-Observed Adverse Effect Level | |
| NOEC | No-Observed Effect Concentration | |
| OECD | Organisation for Economic Co-operation and Development | |
| OEL | Occupational Exposure Limit | |
| РВТ | Persistent Bioaccumulative Toxic | |
| PNEC | Predicted No-Effect Concentration | |

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| Abbreviations and acronyms: | |
|-----------------------------|--|
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

| Full text of H- and EUH-statements: | |
|-------------------------------------|--|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |

Safety Data Sheet (SDS), EU

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