

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

### 1.1 Product identifier

hydraulic fluid  
Article number: 46161

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

#### 1.2.1 Relevant uses

Hydraulics oil

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

**Company** Ferdinand Bilstein GmbH + Co. KG  
Wilhelmstr. 47  
58256 Ennepetal / GERMANY  
Phone +49 2333 911-0  
Fax +49 2333 911-444  
Homepage [www.febi.com](http://www.febi.com)  
E-mail [info@febi.com](mailto:info@febi.com)

#### Address enquiries to

**Technical information** [info@febi.com](mailto:info@febi.com)

**Safety Data Sheet** [info@febi.com](mailto:info@febi.com)

### 1.4 Emergency telephone number

**Advisory body** Call NHS 111 or a doctor  
+49 (0)89-19240 (24h) (English)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.

### 2.2 Label elements

#### Hazard pictograms



#### Signal word

DANGER

#### Contains:

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract)

1-Decene, Dimer, hydrogenated

White mineral oil (petroleum)

#### Hazard statements

H304 May be fatal if swallowed and enters airways.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor.

P331 Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents / container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## 2.3 Other hazards

|                                 |  |
|---------------------------------|--|
| <b>Physico-chemical hazards</b> | No particular hazards known.   |
| <b>Human health dangers</b>     | Frequent persistent contact with the skin can cause skin irritation.<br>If swallowed or in the event of vomiting, risk of product entering the lungs.<br>The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| <b>Environmental hazards</b>    | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.   |
| <b>Other hazards</b>            | Further hazards were not determined with the current level of knowledge.   |

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances not applicable

### 3.2 Mixtures The product is a mixture.

| Range [%]    | Substance  |
|--------------|--|
| 20 - < 50    | Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract)<br>CAS: 72623-86-0, EINECS/ELINCS: 276-737-9, EU-INDEX: 649-221-00-X, Reg-No.: 01-2119474878-16-XXXX<br>GHS/CLP: Asp. Tox. 1: H304   |
| 10 - 20      | 1-Decene, Dimer, hydrogenated<br>CAS: 68649-11-6, EINECS/ELINCS: 500-228-5, Reg-No.: 01-2119493069-28-XXXX<br>GHS/CLP: Acute Tox. 4: H332 - Asp. Tox. 1: H304  |
| 10 - < 20    | White mineral oil (petroleum)<br>CAS: 8042-47-5, EINECS/ELINCS: 232-455-8, Reg-No.: 01-2119487078-27-XXXX<br>GHS/CLP: Asp. Tox. 1: H304  |
| 1 - < 10     | Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics<br>CAS: 1174522-45-2, EINECS/ELINCS: 934-954-2, EU-INDEX: 649-422-00-2, Reg-No.: 01-2119826592-36-XXXX<br>GHS/CLP: Asp. Tox. 1: H304   |
| 0,1 - < 1    | Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>CAS: 68411-46-1, EINECS/ELINCS: 270-128-1, Reg-No.: 01-2119491299-23-XXXX<br>GHS/CLP: Repr. 2: H361f - Aquatic Chronic 3: H412  |
| 0,1 - < 0,25 | 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol<br>CAS: 1218787-32-6, EINECS/ELINCS: 620-540-6, Reg-No.: 01-2119510877-33-XXXX<br>GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1C: H314 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M-Factor (acute): 10, M-Factor (chronic): 1 |

|                                   |  |
|-----------------------------------|--|
| <b>Comment on component parts</b> | For full text of H-statements: see SECTION 16.<br>Contains less than 3% w/w DMSO-extract (only for mineral oils) |
|-----------------------------------|--|

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

|                            |   |
|----------------------------|---|
| <b>General information</b> | Change soaked clothing.   |
| <b>Inhalation</b>          | Ensure supply of fresh air.<br>In the event of symptoms seek medical treatment.   |
| <b>Skin contact</b>        | When in contact with the skin, clean with soap and water.<br>Consult a doctor if skin irritation persists.  |
| <b>Eye contact</b>         | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention. |
| <b>Ingestion</b>           | Do not induce vomiting.<br>Rinse out mouth and give plenty of water to drink.<br>Seek medical advice immediately.   |

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

Irritant effects

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

If swallowed or in the event of vomiting, risk of product entering the lungs.  
Forward this sheet to your doctor.

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

|   |  |
|---|--|
| Suitable extinguishing media              | Foam, dry powder, water spray jet, carbon dioxide. |
| Extinguishing media that must not be used | Full water jet.                                    |

#### 5.2 Special hazards arising from the substance or mixture

Not combusted hydrocarbons.  
Risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)

#### 5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.  
Use self-contained breathing apparatus.  
Cool containers at risk with water spray jet.  
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.  
Forms slippery surfaces with water.

#### 6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Do not discharge into the drains/surface waters/groundwater.

#### 6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).  
Dispose of absorbed material in accordance within the regulations.

#### 6.4 Reference to other sections

See SECTION 8+13

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid formation of aerosols.  
The product is combustible.  
Do not eat, drink or smoke when using this product.  
Use barrier skin cream.  
Wash hands before breaks and after work.  
Cloths contaminated with product should not be kept in trouser pockets.  
Contaminated work clothing should not be allowed out of the workplace.  
Take off contaminated clothing and wash before reuse.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with food and animal food/diet.  
Keep container tightly closed.  
Keep container in a well-ventilated place.

#### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (UK)

|   |
|---|
| Substance   |
| White mineral oil (petroleum)   |
| CAS: 8042-47-5, EINECS/ELINCS: 232-455-8, Reg-No.: 01-2119487078-27-XXXX                            |
| Long-term exposure: 5 mg/m <sup>3</sup> , oil mist TWA, ACGIH                                       |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics                             |
| CAS: 1174522-45-2, EINECS/ELINCS: 934-954-2, EU-INDEX: 649-422-00-2, Reg-No.: 01-2119826592-36-XXXX |
| Long-term exposure: 1200 mg/m <sup>3</sup>  |

#### Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

#### DNEL

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| There are no DNEL values established for the substance.  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| Industrial, dermal, Long-term - systemic effects, 217,05 mg/kg bw/day  |
| Industrial, inhalative, Long-term - systemic effects, 164,56 mg/m <sup>3</sup>                                       |
| general population, inhalative, Long-term - systemic effects, 34,78 mg/m <sup>3</sup>                                |
| general population, dermal, Long-term - systemic effects, 93,02 mg/kg bw/day   |
| general population, oral, Long-term - systemic effects, 25 mg/kg bw/day  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| There are no DNEL values established for the substance.  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup>   |
| Industrial, inhalative, Long-term - local effects, 5.58 mg/m <sup>3</sup>  |
| Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day   |
| general population, inhalative, Long-term - local effects, 1.19 mg/m <sup>3</sup>                                    |
| general population, oral, Long-term - systemic effects, 740 µg/kg bw/day   |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| Industrial, inhalative, Long-term - systemic effects, 2.96 mg/m <sup>3</sup>   |
| Industrial, dermal, Long-term - systemic effects, 420 µg/kg bw/day   |
| general population, inhalative, Long-term - systemic effects, 522 µg/m <sup>3</sup>                                  |
| general population, dermal, Long-term - systemic effects, 150 µg/kg bw/day   |
| general population, oral, Long-term - systemic effects, 150 µg/kg bw/day   |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1                               |
| Industrial, inhalative, Long-term - systemic effects, 0,31 mg/m <sup>3</sup> (AF= 50)                                |
| Industrial, dermal, Long-term - systemic effects, 0,44 mg/kg bw/d (AF= 200)  |
| general population, inhalative, Long-term - systemic effects, 0,08 mg/m <sup>3</sup> (AF= 100)                       |
| general population, dermal, Long-term - systemic effects, 0,22 mg/kg bw/d (AF= 400)                                  |
| general population, oral, Long-term - systemic effects, 0,05 mg/kg bw/d (AF= 400)                                    |

#### PNEC

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2 |
| There are no PNEC values established for the substance.                                    |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| There are no PNEC values established for the substance.                                    |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| freshwater, 0,006 mg/L   |

|  |
|--|
| seawater, 0,006 mg/L   |
| sediment (freshwater), 0,848mg/kg sediment dw  |
| sediment (seawater), 0,848mg/kg sediment dw  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| oral (food), 9.33 mg/kg food   |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| freshwater, 0.214 µg/L   |
| seawater, 0.021 µg/L   |
| sewage treatment plants (STP), 1500 µg/L   |
| sediment (freshwater), 1.692 mg/kg sediment dw   |
| sediment (seawater), 0.169 mg/kg sediment dw   |
| soil, 5 mg/kg soil dw  |
| oral (food), 2 mg/kg food  |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1                               |
| freshwater, 33.8 µg/L  |
| seawater, 3.38 µg/L  |
| sewage treatment plants (STP), 10 mg/L   |
| sediment (freshwater), 446 µg/kg sediment dw   |
| sediment (seawater), 44.6 µg/kg sediment dw  |
| soil, 17.6 mg/kg soil dw   |
| oral (food), 833 µg/kg food  |

## 8.2 Exposure controls

|  |  |
|--|--|
| <b>Additional advice on system design</b>                          | Ensure adequate ventilation on workstation.<br>General exposure limit for oil mist should be noted.<br>Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. |
| <b>Eye protection</b>  | If there is a risk of splashing:<br>Safety glasses. (EN 166:2001)  |
| <b>Hand protection</b>   | The details concerned are recommendations. Please contact the glove supplier for further information.<br>Nitrile butyl rubber (NBR) > 0,38 mm.; (EN 374-1/-2/-3).  |
| <b>Skin protection</b>   | Light protective clothing.   |
| <b>Other</b>   | Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.<br>Avoid contact with eyes and skin.                         |
| <b>Respiratory protection</b>                                      | Breathing apparatus in the event of aerosol or mist formation.<br>Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)  |
| <b>Thermal hazards</b>   | none   |
| <b>Delimitation and monitoring of the environmental exposition</b> | Comply with applicable environmental regulations limiting discharge to air, water and soil.  |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|   |                           |
|---|---------------------------|
| Physical state  | liquid                    |
| Form  | liquid                    |
| Color   | dark green                |
| Odor  | characteristic            |
| Odour threshold   | No information available. |
| pH-value  | not applicable            |
| pH-value [1%]   | not applicable            |
| Boiling point or initial boiling point and boiling range [°C] | No information available. |
| Flash point [°C]  | > 150                     |
| Flammability  | Not highly flammable.     |
| Lower explosion limit   | not applicable            |
| Upper explosion limit   | not applicable            |
| Oxidising properties  | no                        |
| Vapour pressure/gas pressure [kPa]                            | No information available. |
| Density [g/cm³]   | 0,83 (20 °C / 68,0 °F)    |
| Relative density  | not determined            |
| Bulk density [kg/m³]  | not applicable            |
| Solubility in water   | insoluble                 |
| Solubility other solvents                                     | No information available. |
| Partition coefficient n-octanol/water (log value)             | No information available. |
| Kinematic viscosity   | 19 mm²/s (40°C)           |
| Relative vapour density                                       | No information available. |
| Melting point [°C]  | No information available. |
| Auto-ignition temperature [°C]                                | No information available. |
| Decomposition temperature [°C]                                | No information available. |
| Particle characteristics                                      | not applicable            |

### 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

The product is stable under standard conditions.

### 10.3 Possibility of hazardous reactions

Reactions with acids, alkalies and oxidizing agents.

### 10.4 Conditions to avoid

No special measures necessary.

### 10.5 Incompatible materials

Acids  
Oxidizing agent  
Strong basic compounds

#### **10.6 Hazardous decomposition products**

No hazardous decomposition products known.

## SECTION 11: Toxicological information

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

#### Acute oral toxicity

|  |
|--|
| Product  |
| oral, Based on the available information, the classification criteria are not fulfilled.                             |
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| LD50, oral, Rat, >5000 mg/kg bw, OECD 401  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| LD50, oral, Rat, >5000 mg/kg (OECD 401)  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| LD50, oral, Rat, > 5000 mg/kg bw   |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| LD50, oral, Rat, > 5000 mg/kg bw   |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| LD50, oral, Rat, 1200 - 2000 mg/kg bw  |
| NOEL, oral, Rat, 5 mg/kg bw/day  |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1                               |
| LD50, oral, Rat, >5000 mg/kg bw  |
| NOAEL, oral, Rat, 25 mg/kg bw/day  |

#### Acute dermal toxicity

|  |
|--|
| Product  |
| dermal, Based on the available information, the classification criteria are not fulfilled.                           |
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| LD50, dermal, Rabbit, > 3160 mg/kg bw  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| LD50, dermal, Rabbit, >2000 mg/kg (OECD 402)   |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| LD50, dermal, Rabbit, > 3000 mg/kg bw  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| LD50, dermal, Rabbit, > 5000 mg/kg bw  |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| No information available.  |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1                               |
| LD50, dermal, Rat, >2000 mg/kg bw  |

#### Acute inhalational toxicity

|  |
|--|
| Product  |
| ATE-mix, inhalativ (mist), > 5 mg/L  |
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2 |
| LC50, inhalative, Rat, > 5266 mg/m³  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| LC50, inhalative, Rat, >5000 mg/m³ (4h) (OECD 403)   |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| LC50, inhalative, Rat, > 1,81 mg/L air, 4h   |



|  |
|--|
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h  |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| No information available.  |

**Serious eye damage/irritation** Based on the available information, the classification criteria are not fulfilled.

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| Eye, non-irritating  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| Eye, Rabbit, OECD 405, non-irritating  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| Eye, no adverse effect observed  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| Eye, non-irritating  |

**Skin corrosion/irritation** Based on the available information, the classification criteria are not fulfilled.

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| dermal, non-irritating   |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| dermal, Rabbit, OECD 404, non-irritating   |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| dermal, no adverse effect observed   |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| dermal, non-irritating   |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| dermal, corrosive  |

**Respiratory or skin sensitisation** Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| dermal, non-sensitizing  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| dermal, Guinea pig, OECD 406, non-sensitizing  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| dermal, Guinea pig, OECD 406, non-sensitizing  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| dermal, non-sensitizing  |

**Specific target organ toxicity — single exposure** Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

**Specific target organ toxicity — repeated exposure** Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2 |
| NOAEL, oral, Rat, 5000 mg/kg bw/day  |
| NOAEC, inhalative, Rat, 10.4 mg/L air  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| NOAEL, dermal, Rat, 2000 mg/kg bw/day, OECD 411  |
| NOAEL, oral, Rat, 1200 mg/kg bw/day, OECD 451  |

|  |
|--|
| NOEL, inhalative, Rat, 50 mg/m <sup>3</sup> , OECD 412   |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| NOAEL, oral, Rat, 1000 - 6771 mg/kg bw/day   |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> air  |
| LOAEL, dermal, mouse, 100 mg/kg bw/day   |
| LOAEL, oral, Rat, 125 mg/kg bw/day   |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| NOAEL, oral, Dog, 13 mg/kg bw/day  |

#### Mutagenicity

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

|  |
|--|
| Substance  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| in vivo, no adverse effect observed  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| in vitro, negativ  |

#### Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

##### - Fertility

|  |
|--|
| Substance  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| NOAEL, oral, Rat, 1000 mg/kg bw/day (subchronic), no adverse effect observed   |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| NOAEL, oral, Rat, 1000 mg/kg bw/day  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| NOAEL, oral, Rat, 1000 mg/kg bw/day  |

##### - Development

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2 |
| NOAEL, oral, Rat, 1000 mg/kg bw/day  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| NOAEL, oral, Rat, 1000 mg/kg bw/day  |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1     |
| NOAEL, parenteral, 75 mg/kg bw/d, OECD 422   |

#### Carcinogenicity

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.

|   |
|---|
| Substance   |
| White mineral oil (petroleum), CAS: 8042-47-5                             |
| NOAEL, oral, Rat, 1200 mg/kg bw/day, OECD 453, no adverse effect observed |

#### Aspiration hazard

May be fatal if swallowed and enters airways.  
Based on the available information, the classification criteria are fulfilled.  
On basis of test data

#### General remarks

Toxicological data of complete product are not available.  
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## 11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Contains no ingredients with endocrine-disrupting properties.

11.2.2 Other information none

## SECTION 12: Ecological information

### 12.1 Toxicity

|  |
|--|
| Substance  |
| Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0,03% aromatics, CAS: 1174522-45-2                           |
| EC50, (72h), Algae, 10 g/L   |
| NOELR, (28d), Fish, 1 g/L  |
| NOELR, (21d), Invertebrates, 1 g/L   |
| LL50, (96h), Fish, 1.028 g/L   |
| LL50, (48h), Invertebrates, 3.193 g/L  |
| White mineral oil (petroleum), CAS: 8042-47-5  |
| LC50, (96h), Leuciscus idus, >1000 mg/l (OECD 203)   |
| NOEC, (28d), Fish, >= 1000 mg/l  |
| NOEC, (21d), Daphnia sp., >= 1000 mg/l   |
| LL50, (48h), Daphnia magna, >100 mg/l (OECD 202)   |
| NOEL, (72h), Algae, >=100 mg/l (OECD 201)  |
| 1-Decene, Dimer, hydrogenated, CAS: 68649-11-6   |
| LL50, (96h), Fish, > 1000 mg/L   |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (containing < 3% DMSO-extract), CAS: 72623-86-0 |
| NOELR, (14d), Fish, 1 g/L  |
| LL50, (96h), Invertebrates, 10 g/L   |
| LL50, (96h), Fish, 100 mg/L  |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6                               |
| LC50, (24h), Danio rerio, >0.29 mg/L (OECD 203)  |
| EC50, (24h), Daphnia magna, 0.21 mg/L (OECD 202)   |
| EC10, (21d), Daphnia magna, 10.7 µg/L (OECD 211)   |
| EC10, (72h), Daphnia magna, 34.1 µg/L (OECD 201)   |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1                               |
| LC50, (96h), Fish, 100 mg/L  |
| EC50, (48h), Invertebrates, 51 mg/L  |
| EC50, (72h), Invertebrates, 100 mg/L   |
| EL10, (21d), Invertebrates, 1.69 mg/L  |

### 12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

|  |
|--|
| Substance  |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol, CAS: 1218787-32-6 |
| (28d), 63 %, OECD 301 D  |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, CAS: 68411-46-1 |
| The product is not readily biodegradable.  |

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.  
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Coordinate disposal with the authorities if necessary.  
Dispose of as hazardous waste.  
In according to RoHS!

Waste no. (recommended)

130205\* mineral-based non-chlorinated engine, gear and lubricating oils

Contaminated packaging

Uncontaminated packaging may be taken for recycling.  
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended)

150102  
150104  
150110\* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID      not applicable

Inland navigation (ADN)      not applicable

Marine transport in accordance with IMDG      not applicable

Air transport in accordance with IATA      not applicable

#### 14.2 UN proper shipping name

|  |                                     |
|--|-------------------------------------|
| Transport by land according to ADR/RID   | NO DANGEROUS GOODS                  |
| Inland navigation (ADN)                  | NO DANGEROUS GOODS                  |
| Marine transport in accordance with IMDG | NOT CLASSIFIED AS "DANGEROUS GOODS" |
| Air transport in accordance with IATA    | NOT CLASSIFIED AS "DANGEROUS GOODS" |

#### 14.3 Transport hazard class(es)

|  |                |
|--|----------------|
| Transport by land according to ADR/RID   | not applicable |
| Inland navigation (ADN)                  | not applicable |
| Marine transport in accordance with IMDG | not applicable |
| Air transport in accordance with IATA    | not applicable |

#### 14.4 Packing group

|  |                |
|--|----------------|
| Transport by land according to ADR/RID   | not applicable |
| Inland navigation (ADN)                  | not applicable |
| Marine transport in accordance with IMDG | not applicable |
| Air transport in accordance with IATA    | not applicable |

#### 14.5 Environmental hazards

|  |    |
|--|----|
| Transport by land according to ADR/RID   | no |
| Inland navigation (ADN)                  | no |
| Marine transport in accordance with IMDG | no |
| Air transport in accordance with IATA    | no |

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 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

#### EEC-REGULATIONS

2008/98/EG (2000/532/EC ); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707

#### - Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.

#### - Annex XIV (REACH)

According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances  $\geq 0.1\%$  that are subject to authorisation.

#### - Annex XVII (REACH)

According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains  $\geq 0.1\%$  of substances with the following restrictions. 75

According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is subject to the following restrictions. 3

#### TRANSPORT-REGULATIONS

ADR (2025); IMDG-Code (2025, 42. Amdt.); IATA-DGR (2025)

#### NATIONAL REGULATIONS (UK):

EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.

#### - Observe employment restrictions for people

Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

#### - VOC (2010/75/CE)

0%

### 15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 3)

H332 Harmful if inhaled.  
H304 May be fatal if swallowed and enters airways.  
H412 Harmful to aquatic life with long lasting effects.  
H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.  
H400 Very toxic to aquatic life.  
H314 Causes severe skin burns and eye damage.  
H302 Harmful if swallowed.

## 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
ATE = acute toxicity estimate  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging  
DMEL = Derived Minimum Effect Level  
DNEL = Derived No Effect Level  
EC50 = Median effective concentration  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 = Inhibition concentration, 50%  
IMDG = International Maritime Code for Dangerous Goods  
IUCLID = International Uniform Chemical Information Database  
IVIS = In vitro irritation score  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LC0 = lethal concentration, 0%  
LOAEL = lowest-observed-adverse-effect level  
LL50 = Median lethal loading  
LQ = Limited Quantities  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
NOAEL = No Observed Adverse Effect Level  
NOEC = No Observed Effect Concentration  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
STP = Sewage Treatment Plant  
TLV®/TWA = Threshold limit value – time-weighted average  
TLV®STEL = Threshold limit value – short-time exposure limit  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative

## 16.3 Other information

### Classification procedure

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (On basis of test data)

### Modified position

1.3, 2.2, 2.3, 3.2, 4.2, 8.1, 9.1, 11.1, 15.1, 16.2, 16.3