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

1.1  

Product information

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index No.</th>
<th>Legal Entity</th>
<th>Registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dodecene, Trimer, Hydrogenated</td>
<td>151006-62-1</td>
<td>417-070-7</td>
<td>601-064-00-8</td>
<td>Chevron Phillips Chemical Company LP</td>
<td>01-0000016388-62-0004</td>
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<tr>
<td>Dodecene, Homopolymer, Hydrogenated</td>
<td>151006-63-2</td>
<td></td>
<td></td>
<td>Chevron Phillips Chemical Company LP</td>
<td>01-0000018318-67-0002</td>
</tr>
</tbody>
</table>

1.2  

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

Relevant Identified Uses

Supported: Formulation
Lubricants - Industrial
Lubricants - Professional
Lubricants - Consumer
Metal working fluids / rolling oils - Industrial
Metal working fluids / rolling oils – Professional
Functional Fluids - Industrial
Functional Fluids - Professional
Functional Fluids - Consumer

1.3  

Details of the supplier of the safety data sheet

Company: Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Local: Chevron Phillips Chemicals International N.V.
Airport Plaza (Stockholm Building)
Leonardo Da Vincielaan 19
1831 Diegem

SDS Number: 1000000014081 1/33
1.4 Emergency telephone:

**Health:**
866.442.9628 (North America)
1.832.813.4984 (International)

**Transport:**
CHEMTREC 800.424.9300 or 703.527.3887 (int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

**Responsible Department:** Product Safety and Toxicology Group
**E-mail address:** SDS@CPChem.com
**Website:** www.CPChem.com

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**REGULATION (EC) No 1272/2008**

<table>
<thead>
<tr>
<th>Category</th>
<th>Hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term (chronic) aquatic hazard, Category 4</td>
<td>H413:</td>
<td>May cause long lasting harmful effects to aquatic life.</td>
</tr>
</tbody>
</table>

#### 2.2 Labeling (REGULATION (EC) No 1272/2008)

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>Prevention</th>
<th>Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>H413:</td>
<td>P273</td>
<td>P501</td>
</tr>
</tbody>
</table>

Avoid release to the environment.
Dispose of contents/container to an approved waste disposal plant.

**Additional Labeling:**
The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 0%
SECTION 3: Composition/information on ingredients

3.1 - 3.2 Substance or Mixture

Synonyms: SYNTHETIC HYDROCARBON BASE OIL
OL6705
Polyalphaolefin
R6529
PAO

Molecular formula: UVCB

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No. EC-No. Index No.</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration [wt%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Dodecene, Trimer, Hydrogenated</td>
<td>151006-62-1 417-070-7 601-064-00-8</td>
<td>Aquatic Chronic 4; H413</td>
<td>50 - 80</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice: No hazards which require special first aid measures. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Show this material safety data sheet to the doctor in attendance.

If inhaled: Move to fresh air in case of accidental inhalation of vapors. Consult a physician after significant exposure.

In case of skin contact: Remove contaminated clothing. If irritation develops, get medical attention. Wash off immediately with plenty of water.

In case of eye contact: Flush eyes with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: If swallowed, DO NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing: Use water spray, alcohol-resistant foam, dry chemical or
SAFETY DATA SHEET

Synfluid® PAO 5 cSt

Version 1.10

Revision Date 2019-11-25

media carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray.

5.3 Advice for firefighters
Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire and explosion protection : Normal measures for preventive fire protection.

Hazardous decomposition products : Carbon oxides.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.

6.2 Environmental precautions
Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up : Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

Additional advice : No conditions to be specially mentioned.

6.4 Reference to other sections
Reference to other sections : For personal protection see section 8. For disposal considerations see section 13.

A quantitative risk assessment is not required for human health.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handling : Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance

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with local and national regulations.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Engineering measures
Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Lightweight protective clothing.

Hygiene measures: When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

Protective measures: Wear suitable protective equipment. When using do not eat, drink or smoke.

A quantitative risk assessment is not required for human health.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Form: Liquid
Physical state: Liquid
Color: Colorless
Odor: Odorless

Safety data
Flash point: 246-271°C (475-520°F)
Method: Cleveland Open Cup
Lower explosion limit: No data available
Upper explosion limit: No data available
Oxidizing properties: no
Autoignition temperature: 351°C (664°F)
Molecular formula: UVCB
Molecular weight: Not applicable
pH: Not applicable
Pour point: <-40°C (<-40°F)
Boiling point/boiling range: >260°C (>500°F)
Vapor pressure: No data available
Density: 6.87 - 6.96 L/G
Water solubility: Soluble in hydrocarbon solvents; insoluble in water.
Viscosity, kinematic: 24.7 cSt at 40°C (104°F)
Method: ASTM D 445
Relative vapor density: No data available
Evaporation rate: No data available
**SECTION 10: Stability and reactivity**

10.1 Reactivity : Stable at normal ambient temperature and pressure.

10.2 Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

   **Hazardous reactions** : Hazardous reactions: No dangerous reaction known under conditions of normal use.

   Hazardous reactions: Hazardous polymerization does not occur.

   Further information: No decomposition if stored and applied as directed.

10.4 Conditions to avoid : No data available.

10.5 Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.6 Hazardous decomposition products : Carbon oxides

   Other data : No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information**

11.1 Information on toxicological effects

   **Synfluid® PAO 5 cSt**

   **Acute oral toxicity** : LD50: > 5,000 mg/kg

   Species: Rat

   Information given is based on data obtained from similar substances.

   **Synfluid® PAO 5 cSt**

   **Acute inhalation toxicity** : LC50: > 5 mg/l

   Exposure time: 4 h

   Species: Rat

   Test atmosphere: dust/mist

   Information given is based on data obtained from similar substances.
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synfluid® PAO 5 cSt</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Acute dermal toxicity**        | LD50: > 2000 mg/kg  
Species: Rat  
Information given is based on data obtained from similar substances. |
| **Skin irritation**              | No skin irritation  
Information given is based on data obtained from similar substances. |
| **Eye irritation**               | No eye irritation  
Information given is based on data obtained from similar substances. |
| **Sensitization**                | Did not cause sensitization on laboratory animals.  
Information given is based on data obtained from similar substances. |
| **Repeated dose toxicity**       | Species: Rat, Male and female  
Sex: Male and female  
Application Route: oral gavage  
Dose: 0, 1000 mg/kg/day  
Exposure time: 28 days  
NOEL: 1000 mg/kg  
Method: OECD Test Guideline 407  
Information given is based on data obtained from similar substances. |
| **Genotoxicity in vitro**        | Test Type: Ames test  
Result: negative  
Remarks: Information refers to the main ingredient.  
Test Type: Chromosome aberration test in vitro  
Result: negative  
Remarks: Information refers to the main ingredient. |
| **Aspiration toxicity**          | No aspiration toxicity classification. |
| **Toxicology Assessment**        |             |
| **CMR effects**                  | Carcinogenicity: |
SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicity effects:

Toxicity to fish:
- LL50: > 1.000 mg/l
- Exposure time: 96 h
- Species: Oncorhynchus mykiss (rainbow trout)
- Test substance: no
- Method: OECD Test Guideline 203
- Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates:
- EL50: > 1.000 mg/l
- Exposure time: 48 h
- Species: Daphnia magna (Water flea)
- Test substance: no
- Method: OECD Test Guideline 202
- Information given is based on data obtained from similar substances.

Toxicity to algae:
- NOEC: > 1.000 mg/l
- Exposure time: 96 h
- Species: Selenastrum capricornutum (algae)
- Method: OECD Test Guideline 201
- Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC: 125 mg/l
- Exposure time: 21 d
- Species: Daphnia magna (Water flea)
- Test substance: no
- The product has low solubility in the test medium. An aqueous dispersion was tested.
- Information given is based on data obtained from similar substances.

12.2 Persistence and degradability

Biodegradability:
- This material is not expected to be readily biodegradable.
- Expected to be ultimately biodegradable

12.3 Bioaccumulative potential
12.4 Elimination information (persistence and degradability)

Mobility in soil

Mobility : No data available

12.5 Results of PBT and vPvB assessment

Results of PBT assessment : 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.

12.6 Other adverse effects

Ecotoxicology Assessment

Long-term (chronic) aquatic hazard : May cause long lasting harmful effects to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

A quantitative risk assessment is not required for human health.

SECTION 14: Transport information

14.1 - 14.7 Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.
**Synfluid® PAO 5 cSt**

**Version 1.10**

**Revision Date 2019-11-25**

<table>
<thead>
<tr>
<th>Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)</strong></td>
</tr>
<tr>
<td>NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.</td>
</tr>
<tr>
<td><strong>IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)</strong></td>
</tr>
<tr>
<td>NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.</td>
</tr>
<tr>
<td><strong>ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))</strong></td>
</tr>
<tr>
<td>NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.</td>
</tr>
<tr>
<td><strong>RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))</strong></td>
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<tr>
<td>NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.</td>
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<tr>
<td><strong>ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)</strong></td>
</tr>
<tr>
<td>NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.</td>
</tr>
</tbody>
</table>

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### SECTION 15: Regulatory information

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

National legislation


Water contaminating class (Germany): **WGK 1** slightly water endangering

#### 15.2 Chemical Safety Assessment

**Components**: 1-Dodecene, Trimer, Hydrogenated

**Chemical Safety Assessment**: 1-Dodecene, Homopolymer, Hydrogenated

**Major Accident Hazard Legislation**: 96/82/EC Update: 2003 Directive 96/82/EC does not apply

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Notification status
Europe  REACH : This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).
Switzerland  CH INV : Not in compliance with the inventory
United States of America (USA)  TSCA : On or in compliance with the active portion of the TSCA inventory
Canada  DSL : All components of this product are on the Canadian DSL
Australia  AICS : On the inventory, or in compliance with the inventory
New Zealand  NZIoC : On the inventory, or in compliance with the inventory
Japan  ENCS : On the inventory, or in compliance with the inventory
Korea  KECl : All substances in this product were registered, notified to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was included on CPChem’s notifications or if the Importer of Record themselves notified the substances.

Philippines  PICCS : On the inventory, or in compliance with the inventory
China  IECSC : On the inventory, or in compliance with the inventory
Taiwan  TCSI : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 0
Fire Hazard: 1
Reactivity Hazard: 0

Further information
Legacy SDS Number : 5940

NSF H1, HX-1 Registered, meets USDA 1998 H1 Guidelines

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
</tbody>
</table>

SDS Number:100000014081  12/33
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Synonym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
<td>NFPA</td>
<td>National Fire Protection Agency</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
<td>NIOSH</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
<td>NZIoC</td>
<td>New Zealand Inventory of Chemicals</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
<td>NOAEL</td>
<td>No Observable Adverse Effect Level</td>
</tr>
<tr>
<td>EGEST</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
</tr>
<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty Chemicals Association</td>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
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<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
<td>PRNT</td>
<td>Presumed Not Toxic</td>
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<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act.</td>
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<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
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<td></td>
</tr>
</tbody>
</table>

**Full text of H-statements referred to under sections 2 and 3.**

H413 May cause long lasting harmful effects to aquatic life.
## Annex: Exposure Scenarios

### Table of Contents

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES 1</td>
<td>Formulation; Industrial uses (SU3).</td>
</tr>
<tr>
<td>ES 2</td>
<td>Lubricants - Industrial; Industrial uses (SU3).</td>
</tr>
<tr>
<td>ES 3</td>
<td>Lubricants - Professional; Professional uses (SU22).</td>
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<tr>
<td>ES 4</td>
<td>Lubricants - Consumer; Consumer uses (SU21).</td>
</tr>
<tr>
<td>ES 5</td>
<td>Metal working fluids / rolling oils - Industrial; Industrial uses (SU3).</td>
</tr>
<tr>
<td>ES 6</td>
<td>Metal working fluids / rolling oils - Industrial; Professional uses (SU22).</td>
</tr>
<tr>
<td>ES 7</td>
<td>Functional Fluids - Industrial; Industrial uses (SU3).</td>
</tr>
<tr>
<td>ES 8</td>
<td>Functional Fluids - Professional; Professional uses (SU22).</td>
</tr>
<tr>
<td>ES 9</td>
<td>Functional Fluids - Consumer; Consumer uses (SU21).</td>
</tr>
</tbody>
</table>
1.1. Title section

Exposure Scenario name: Formulation
Structured Short Title: Formulation; Industrial uses (SU3).
Substance: 1-Dodecene trimer, hydrogenated
EC-No.: 417-070-7

1.2. Conditions of use affecting exposure

1.2.1. Control of environmental exposure: Formulation into mixture (ERC2)

Product (article) characteristics

Amount used (or contained in articles), frequency and duration of use/exposure

Release type: Continuous release
Emission days: 300

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses.
Provide onsite wastewater treatment.
Air - minimum efficiency of 0,001 %
Water - minimum efficiency of 0,01 %
Soil - minimum efficiency of 0,001 %

Conditions and measures related to sewage treatment plant

STP type: Municipal sewage treatment plant
STP sludge treatment: Controlled application of sewage sludge to agricultural soil
STP effluent: 2.000 m3/d

Other conditions affecting environmental exposure

Receiving surface water flow: 18.000 m3/d
Local freshwater dilution factor: 10
Local marine water dilution factor: 100
1.3. Exposure estimation and reference to its source

1.3.1. Environmental release and exposure: Formulation into mixture (ERC2)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0,0000236 mg/m³ (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0,0000009 mg/l (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0,072 mg/kg wet weight (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Sea water</td>
<td>0,0000002 mg/l (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0,018 mg/kg wet weight (EUSES)</td>
<td>0,462</td>
</tr>
<tr>
<td>Soil</td>
<td>1,0 mg/kg wet weight (EUSES)</td>
<td>0,227</td>
</tr>
</tbody>
</table>

1.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
ES 2: Lubricants - Industrial; Industrial uses (SU3).

2.1. Title section

<table>
<thead>
<tr>
<th>Exposure Scenario name</th>
<th>Lubricants - Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Short Title</td>
<td>Lubricants - Industrial; Industrial uses (SU3).</td>
</tr>
<tr>
<td>Substance</td>
<td>1-Dodecene trimer, hydrogenated</td>
</tr>
<tr>
<td></td>
<td>EC-No.: 417-070-7</td>
</tr>
</tbody>
</table>

2.2. Conditions of use affecting exposure

2.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Product (article) characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covers percentage substance in the product up to 100 %.</td>
</tr>
</tbody>
</table>

**Amount used (or contained in articles), frequency and duration of use/exposure**

<table>
<thead>
<tr>
<th>Release type</th>
<th>Continuous release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission days</td>
<td>300</td>
</tr>
</tbody>
</table>

**Technical and organisational conditions and measures**

Try to prevent the material from entering drains or water courses.
Provide onsite wastewater treatment.
Air - minimum efficiency of 0,003 %
Water - minimum efficiency of 0,000 %
Soil - minimum efficiency of 0,1 %

**Conditions and measures related to sewage treatment plant**

<table>
<thead>
<tr>
<th>STP type</th>
<th>Municipal sewage treatment plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP sludge treatment</td>
<td>Controlled application of sewage sludge to agricultural soil</td>
</tr>
<tr>
<td>STP effluent</td>
<td>2.000 m3/d</td>
</tr>
</tbody>
</table>

**Other conditions affecting environmental exposure**

SDS Number:100000014081
2.3. Exposure estimation and reference to its source

2.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0,0000044 mg/m³ (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0,0000009 mg/l (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0,072 mg/kg wet weight (EUSES)</td>
<td></td>
</tr>
<tr>
<td>Sea water</td>
<td>0,0000002 mg/l (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0,018 mg/kg wet weight (EUSES)</td>
<td>0,462</td>
</tr>
<tr>
<td>Soil</td>
<td>0,08 mg/kg wet weight (EUSES)</td>
<td>0,018</td>
</tr>
</tbody>
</table>

2.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
3.1. Title section

<table>
<thead>
<tr>
<th>Exposure Scenario name</th>
<th>Lubricants - Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Short Title</td>
<td>Lubricants - Professional; Professional uses (SU22).</td>
</tr>
<tr>
<td>Substance</td>
<td>1-Dodecene trimer, hydrogenated</td>
</tr>
<tr>
<td>EC-No.:</td>
<td>417-070-7</td>
</tr>
</tbody>
</table>

3.2. Conditions of use affecting exposure

3.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

3.2.2. Conditions of use affecting exposure

<table>
<thead>
<tr>
<th>Product (article) characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covers percentage substance in the product up to 100 %.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount used (or contained in articles), frequency and duration of use/exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release type</td>
</tr>
<tr>
<td>Emission days</td>
</tr>
</tbody>
</table>

3.3. Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment. Air - minimum efficiency of 0.01 % Water - minimum efficiency of 0.25 % Soil - minimum efficiency of 0.25 %

3.4. Conditions and measures related to sewage treatment plant

<table>
<thead>
<tr>
<th>STP type</th>
<th>Municipal sewage treatment plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP sludge treatment</td>
<td>Controlled application of sewage sludge to agricultural soil</td>
</tr>
<tr>
<td>STP effluent</td>
<td>2.000 m3/d</td>
</tr>
</tbody>
</table>

3.5. Other conditions affecting environmental exposure

SDS Number: 100000014081
3.3. Exposure estimation and reference to its source

3.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0,0000044 mg/m³ (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0,0000009 mg/l (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0,072 mg/kg wet weight (EUSES)</td>
<td></td>
</tr>
<tr>
<td>Sea water</td>
<td>0,0000002 mg/l (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0,018 mg/kg wet weight (EUSES)</td>
<td>0,462</td>
</tr>
<tr>
<td>Soil</td>
<td>0,08 mg/kg wet weight (EUSES)</td>
<td>0,841</td>
</tr>
</tbody>
</table>

3.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
ES 4: Lubricants - Consumer; Consumer uses (SU21).

4.1. Title section

<table>
<thead>
<tr>
<th>Exposure Scenario name</th>
<th>Lubricants - Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Short Title</td>
<td>Lubricants - Consumer; Consumer uses (SU21).</td>
</tr>
<tr>
<td>Substance</td>
<td>1-Dodecene trimer, hydrogenated</td>
</tr>
<tr>
<td></td>
<td>EC-No.: 417-070-7</td>
</tr>
</tbody>
</table>

4.2. Conditions of use affecting exposure

4.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

<table>
<thead>
<tr>
<th>Release type</th>
<th>Continuous release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission days</td>
<td>365</td>
</tr>
</tbody>
</table>

Other conditions affecting environmental exposure

<table>
<thead>
<tr>
<th>Receiving surface water flow</th>
<th>18.000 m3/d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local freshwater dilution factor</td>
<td>10</td>
</tr>
<tr>
<td>Local marine water dilution factor</td>
<td>100</td>
</tr>
</tbody>
</table>
4.3. Exposure estimation and reference to its source

4.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Use of functional fluid at industrial site (ERC7) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Additional information on exposure estimation

Not applicable for wide dispersive uses.

4.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
5.1. Title section

Exposure Scenario name: Metal working fluids / rolling oils - Industrial

Structured Short Title: Metal working fluids / rolling oils - Industrial; Industrial uses (SU3).

Substance: 1-Dodecene trimer, hydrogenated
EC-No.: 417-070-7

5.2. Conditions of use affecting exposure

5.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type: Continuous release
Emission days: 20

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment.
Air - minimum efficiency of 0,001 %
Water - minimum efficiency of 0,000 %
Soil - minimum efficiency of 0 %

Conditions and measures related to sewage treatment plant

STP type: Municipal sewage treatment plant
STP sludge treatment: Controlled application of sewage sludge to agricultural soil
STP effluent: 2.000 m3/d

Other conditions affecting environmental exposure

Receiving surface water flow: 18.000 m3/d
5.3. Exposure estimation and reference to its source

5.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0,000009 mg/m³ (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0,0000009 mg/l (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0,072 mg/kg wet weight (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Sea water</td>
<td>0,0000002 mg/l (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0,018 mg/kg wet weight (EUSES)</td>
<td>0,462</td>
</tr>
<tr>
<td>Soil</td>
<td>0,167 mg/kg wet weight (EUSES)</td>
<td>0,038</td>
</tr>
</tbody>
</table>

5.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
6.1. Title section

Exposure Scenario name: Metal working fluids / rolling oils - Professional

Structured Short Title: Metal working fluids / rolling oils - Industrial; Professional uses (SU22).

Substance: 1-Dodecene trimer, hydrogenated
EC-No.: 417-070-7

6.2. Conditions of use affecting exposure

6.2.1. Control of environmental exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

Release type: Continuous release
Emission days: 365

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses.
Provide onsite wastewater treatment.
Air - minimum efficiency of 0,01 %
Water - minimum efficiency of 1,25 %
Soil - minimum efficiency of 1,25 %

Conditions and measures related to sewage treatment plant

STP type: Municipal sewage treatment plant
STP sludge treatment: Controlled application of sewage sludge to agricultural soil
STP effluent: 2.000 m3/d

Other conditions affecting environmental exposure

Receiving surface water flow: 18.000 m3/d

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| Local freshwater dilution factor | 10 |
| Local marine water dilution factor | 100 |

### 6.3. Exposure estimation and reference to its source

#### 6.3.1. Environmental release and exposure: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4) / Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a) / Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8d) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0,0000005 mg/m³ (EUSES)</td>
<td>0,000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0,0000009 mg/l (EUSES)</td>
<td>0,184</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0,072 mg/kg wet weight (EUSES)</td>
<td>0,462</td>
</tr>
<tr>
<td>Sea water</td>
<td>0,0000002 mg/l (EUSES)</td>
<td>0,017</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0,018 mg/kg wet weight (EUSES)</td>
<td>0,462</td>
</tr>
<tr>
<td>Soil</td>
<td>0,076 mg/kg wet weight (EUSES)</td>
<td>0,017</td>
</tr>
</tbody>
</table>

### 6.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
**7.1. Title section**

<table>
<thead>
<tr>
<th>Exposure Scenario name</th>
<th>Functional Fluids - Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Short Title</td>
<td>Functional Fluids - Industrial; Industrial uses (SU3).</td>
</tr>
<tr>
<td>Substance</td>
<td>1-Dodecene trimer, hydrogenated</td>
</tr>
<tr>
<td></td>
<td>EC-No.: 417-070-7</td>
</tr>
</tbody>
</table>

**Environment**

<table>
<thead>
<tr>
<th>CS 1</th>
<th>Functional Fluids - Industrial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ERC7, ERC9a, ERC9b</td>
</tr>
</tbody>
</table>

**7.2. Conditions of use affecting exposure**

7.2.1. Control of environmental exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

**Product (article) characteristics**

Covers percentage substance in the product up to 100 %.

**Amount used (or contained in articles), frequency and duration of use/exposure**

- **Release type**: Continuous release
- **Emission days**: 20

**Technical and organisational conditions and measures**

Try to prevent the material from entering drains or water courses.
Provide onsite wastewater treatment.
Air - minimum efficiency of 0,01 %
Water - minimum efficiency of 0,000 %
Soil - minimum efficiency of 0,1 %

**Conditions and measures related to sewage treatment plant**

- **STP type**: Municipal sewage treatment plant
- **STP sludge treatment**: Controlled application of sewage sludge to agricultural soil
- **STP effluent**: 2.000 m³/d

**Other conditions affecting environmental exposure**

- **Receiving surface water flow**: 18.000 m³/d
- **Local freshwater dilution factor**: 10
- **Local marine water dilution factor**: 100
7.3. Exposure estimation and reference to its source

7.3.1. Environmental release and exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0.0000012 mg/m³ (EUSES)</td>
<td>0.000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0.0000009 mg/l (EUSES)</td>
<td>0.000</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0.072 mg/kg wet weight (EUSES)</td>
<td>0.184</td>
</tr>
<tr>
<td>Sea water</td>
<td>0.0000002 mg/l (EUSES)</td>
<td>0.000</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0.018 mg/kg wet weight (EUSES)</td>
<td>0.462</td>
</tr>
<tr>
<td>Soil</td>
<td>0.077 mg/kg wet weight (EUSES)</td>
<td>0.017</td>
</tr>
</tbody>
</table>

7.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
ES 8: Functional Fluids - Professional; Professional uses (SU22).

8.1. Title section

<table>
<thead>
<tr>
<th>Exposure Scenario name</th>
<th>Functional Fluids - Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Short Title</td>
<td>Functional Fluids - Professional; Professional uses (SU22).</td>
</tr>
<tr>
<td>Substance</td>
<td>1-Dodecene trimer, hydrogenated EC-No.: 417-070-7</td>
</tr>
</tbody>
</table>

8.2. Conditions of use affecting exposure

8.2.1. Control of environmental exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

Product (article) characteristics

Covers percentage substance in the product up to 100 %.

Amount used (or contained in articles), frequency and duration of use/exposure

<table>
<thead>
<tr>
<th>Release type</th>
<th>Continuous release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission days</td>
<td>365</td>
</tr>
</tbody>
</table>

Technical and organisational conditions and measures

Try to prevent the material from entering drains or water courses. Provide onsite wastewater treatment.
Air - minimum efficiency of 0,01 %
Water - minimum efficiency of 0,625 %
Soil - minimum efficiency of 0,625 %

Conditions and measures related to sewage treatment plant

<table>
<thead>
<tr>
<th>STP type</th>
<th>Municipal sewage treatment plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP sludge treatment</td>
<td>Controlled application of sewage sludge to agricultural soil</td>
</tr>
<tr>
<td>STP effluent</td>
<td>2.000 m3/d</td>
</tr>
</tbody>
</table>

Other conditions affecting environmental exposure

<table>
<thead>
<tr>
<th>Receiving surface water flow</th>
<th>18.000 m3/d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local freshwater dilution factor</td>
<td>10</td>
</tr>
<tr>
<td>Local marine water dilution factor</td>
<td>100</td>
</tr>
</tbody>
</table>

SDS Number:100000014081 30/33
8.3. Exposure estimation and reference to its source

8.3.1. Environmental release and exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

<table>
<thead>
<tr>
<th>Protection Target</th>
<th>Exposure estimate</th>
<th>RCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0.00000005 mg/m³ (EUSES)</td>
<td>0.000</td>
</tr>
<tr>
<td>Freshwater</td>
<td>0.0000009 mg/l (EUSES)</td>
<td>0.184</td>
</tr>
<tr>
<td>Freshwater sediment</td>
<td>0.072 mg/kg wet weight (EUSES)</td>
<td>0.000</td>
</tr>
<tr>
<td>Sea water</td>
<td>0.0000002 mg/l (EUSES)</td>
<td>0.462</td>
</tr>
<tr>
<td>Sea sediment</td>
<td>0.018 mg/kg wet weight (EUSES)</td>
<td>0.016</td>
</tr>
<tr>
<td>Soil</td>
<td>0.072 mg/kg wet weight (EUSES)</td>
<td></td>
</tr>
</tbody>
</table>

8.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable
Synfluid® PAO 5 cSt

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Revision Date 2019-11-25

ES 9: Functional Fluids - Consumer; Consumer uses (SU21).

9.1. Title section

<table>
<thead>
<tr>
<th>Exposure Scenario name</th>
<th>Functional Fluids - Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured Short Title</td>
<td>Functional Fluids - Consumer; Consumer uses (SU21).</td>
</tr>
<tr>
<td>Substance</td>
<td>1-Dodecene trimer, hydrogenated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ES 9: Functional Fluids - Consumer; Consumer uses (SU21).</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
</table>

**CS 1** Lubricants - Consumer

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC-No.: 417-070-7</th>
</tr>
</thead>
</table>

**9.2. Conditions of use affecting exposure**

9.2.1. Control of environmental exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

**Product (article) characteristics**

- Covers percentage substance in the product up to 100 %.

**Amount used (or contained in articles), frequency and duration of use/exposure**

- Release type: Continuous release
- Emission days: 365

**Other conditions affecting environmental exposure**

- Receiving surface water flow: 18,000 m3/d
- Local freshwater dilution factor: 10
- Local marine water dilution factor: 100

**9.3. Exposure estimation and reference to its source**

9.3.1. Environmental release and exposure: Use of functional fluid at industrial site (ERC7) / Widespread use of functional fluid (indoor) (ERC9a) / Widespread use of functional fluid (outdoor) (ERC9b)

**Additional information on exposure estimation**

- Not applicable for wide dispersive uses.

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9.4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Not applicable