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

1.1. Product identifier
ViVA 1 topsynth alpha LS 5W-40

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

Use of the substance/mixture
engine oil

Uses advised against
none

1.3. Details of the supplier of the safety data sheet

Company name: SRS Schmierstoff Vertrieb GmbH
Street: Neuenkirchner Straße 8
Place: D-48499 Salzbergen
Telephone: 05976 - 945-0
Responsible Department: Abt. Produktsicherheit: info.reach@srs-oil.de

1.4. Emergency telephone number:

+49 551 19240, GIZ-Nord, Göttingen, Germany

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008
This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

Regulation (EC) No. 1272/2008
Special labelling of certain mixtures
EUH210 Safety data sheet available on request.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EC No</td>
<td>Index No</td>
</tr>
<tr>
<td>64742-54-7</td>
<td>Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic</td>
<td>30 - &lt; 35 %</td>
</tr>
<tr>
<td>265-157-1</td>
<td>649-467-00-8</td>
<td>01-211948627-25</td>
</tr>
<tr>
<td>36878-20-3</td>
<td>Bis(nonylphenyl)amine</td>
<td>1 - &lt; 5 %</td>
</tr>
<tr>
<td>253-249-4</td>
<td>01-2119488911-28</td>
<td></td>
</tr>
</tbody>
</table>

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

Further Information

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation
In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes
Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion
Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

4.2. Most important symptoms and effects, both acute and delayed
If swallowed or in the event of vomiting, risk of entering the lungs.

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
High power water jet

5.2. Special hazards arising from the substance or mixture
Burning produces heavy smoke. Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2) Sulphur dioxide (SO2) Nitrogen oxides (NOx) Phosphorus oxides

5.3. Advice for firefighters
In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment (refer to section 8). Ventilate affected area. Special danger of slipping by leaking/spilling product.
6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Treat the recovered material as prescribed in the section on waste disposal.
- Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- **Advice on safe handling**
  - Wear suitable protective clothing. (See section 8.)
  - Avoid formation of oil dust.

- **Advice on protection against fire and explosion**
  - Usual measures for fire prevention. Keep away from sources of ignition - No smoking.
  - Fire class B

- **Further information on handling**
  - Do not breathe vapour/aerosol.
  - Avoid contact with eyes and skin.
  - Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

- **Requirements for storage rooms and vessels**
  - Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

- **Advice on storage compatibility**
  - Do not store together with: Gas. Explosives. Radioactive substances. Infectious substances

- **Further information on storage conditions**
  - Temperature control required. Protect from light. Keep container tightly closed. Do not allow contact with air.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**DNEL/DMEL values**

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>DNEL type</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>36878-20-3</td>
<td>Bis(nonylphenyl)amine</td>
<td>Worker DNEL, acute</td>
<td>dermal</td>
<td>systemic</td>
<td>5 mg/kg bw/day</td>
</tr>
</tbody>
</table>
### PNEC values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Environmental compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-54-7</td>
<td>Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic</td>
<td>Secondary poisoning</td>
<td>9.33 mg/kg</td>
</tr>
<tr>
<td>36878-20-3</td>
<td>Bis(nonylphenyl)amine</td>
<td>Freshwater</td>
<td>0.1 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freshwater (intermittent releases)</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine water</td>
<td>0.01 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine water (intermittent releases)</td>
<td>13200 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freshwater sediment</td>
<td>132000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td>1 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soil</td>
<td>263000 mg/kg</td>
</tr>
</tbody>
</table>

**Additional advice on limit values**

- **Air limit values:**
  - Possibility of exposure to Aerosol
  - Limit value = 5 mg/ m³ - Source: ACGIH

### 8.2 Exposure controls

**Appropriate engineering controls**
Provide adequate ventilation.

**Protective and hygiene measures**
Clean skin thoroughly after working.
Do not put any product-impregnated cleaning rags into your trouser pockets.

**Eye/face protection**
Safety goggles with side protection. In case of increased risk add protective face shield. DIN EN 166

**Hand protection**
Use safety gloves of following materials: NBR (nitrile) / neopren / viton (permeationslevel 5 - 6), Cat. II according to norm EN 347/EN 388.
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**
Oil-resistant and hardly inflammable protective clothing.

**Respiratory protection**
With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
- aerosol or mist formation
- exceeding exposure limit values
Suitable respiratory protection apparatus: Respiratory equipment in case of nebulosity or aerosol: Use a mask with a filter type A2, A2/P2 or ABEK.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: clear
Odour: characteristic

Test method:

pH-Value: No information available.

Changes in the physical state

Melting point: No information available.
Initial boiling point and boiling range: No information available.
Sublimation point: No information available.
Softening point: No information available.
Pour point: -39 °C ISO 3016
Flash point: 236 °C DIN ISO 2592
Sustaining combustion: No data available

Flammability
Solid: No information available.
Gas: No information available.

Explosive properties
none

Lower explosion limits: No information available.
Upper explosion limits: No information available.
Ignition temperature: No information available.

Auto-ignition temperature
Solid: No information available.
Gas: No information available.

Decomposition temperature: No information available.

Oxidizing properties
none

Vapour pressure:
(at 20 °C) No information available.
(at 50 °C) No information available.

Density (at 15 °C): 0.853 g/cm³ DIN 51757
Bulk density: No information available.

Water solubility: No information available.

Solubility in other solvents
No information available.

Partition coefficient: No information available.
Viscosity / dynamic: No information available.
Viscosity / kinematic: 75,1 mm²/s DIN EN ISO 3104
(at 40 °C)
Flow time: No information available.
Vapour density: No information available.
Evaporation rate: No information available.
Solvent separation test: No information available.
Solvent content: No information available.
Solid content: No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Stable at ambient temperature.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
Oxidising agent, strong

10.5. Incompatible materials

10.6. Hazardous decomposition products
No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution
No information available.

Acute toxicity
Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-54-7</td>
<td>Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td>36878-20-3</td>
<td>Bis(nonylphenyl)amine</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>ECHA Dossier</td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitising effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic:
In vitro mutagenicity/genotoxicity Method: OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies); Species: Mouse.; Results: Non-carcinogenic if DMSO extract as measured by IP346 is less than 3% m/m. Literature information: ECHA Dossier; Reproductive toxicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Results: NOAEL > 1000 mg/kg Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Results: NOAEL >= 2000 mg/kg Literature information: ECHA Dossier

Bis(nonylphenyl)amine:
Developmental toxicity/teratogenicity: Species: Rat (Wistar); Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Result: NOAEL >= 500 mg/kg; Literature information: ECHA Dossier

STOT-single exposure
Based on available data, the classification criteria are not met.

STOT-repeated exposure
Based on available data, the classification criteria are not met.

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic:
Subacute inhalative toxicity: Method: -; Exposure time: 28d; Species: Rat; Results: NOAEL >980 mg/m3; Literature information: ECHA Dossier; Subacute dermal toxicity: Method: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study); Exposure time: 28d; Species: Rabbit; Results: 1000 mg/kg; Literature information: ECHA Dossier

Bis(nonylphenyl)amine:
Subchronic oral toxicity: Exposure time: 90d; Species: Han Wistar Rat.; Method: OECD Guideline 408; Result: LOAEL = 100 mg/kg; Literature information: ECHA Dossier

Aspiration hazard
Based on available data, the classification criteria are not met.

Practical experience
Other observations
Frequent contact specially if dried out may cause skin and eye irritations.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-54-7</td>
<td>Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic</td>
<td>NOEC 10 mg/l</td>
<td>21</td>
<td>Daphnia magna (OECD 211)</td>
<td>ECHA Dossier</td>
<td></td>
</tr>
<tr>
<td>36878-20-3</td>
<td>Bis(nonylphenyl)amine</td>
<td>LC50 &gt;100 mg/l</td>
<td>96</td>
<td>Brachydano rario (new name: Danio rario) (OECD 20)</td>
<td>ECHA Dossier</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.
12.3. Bioaccumulative potential
No indication of bioaccumulation potential.

12.4. Mobility in soil
No information available.

12.5. Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal
Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste disposal number of contaminated packaging
150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging
Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. **UN proper shipping name:** No dangerous good in sense of this transport regulation.

14.3. **Transport hazard class(es):** No dangerous good in sense of this transport regulation.

14.4. **Packing group:** No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

14.1. **UN number:** No dangerous good in sense of this transport regulation.

14.2. **UN proper shipping name:** No dangerous good in sense of this transport regulation.

14.3. **Transport hazard class(es):** No dangerous good in sense of this transport regulation.

14.4. **Packing group:** No dangerous good in sense of this transport regulation.

14.5. **Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

14.6. **Special precautions for user**

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

14.7. **Transport in bulk according to Annex II of Marpol and the IBC Code**

not relevant

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

- Entry 28: Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**Additional information**

Observe in addition any national regulations!

**National regulatory information**

Water contaminating class (D): 2 - water contaminating

**Additional information**

none

15.2 **Chemical Safety Assessment**

not applicable.

**SECTION 16: Other information**

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,5,9,11,12,15,16.

Revis.: 1.0 - 24.04.2015

Revis.: 1.1 - 29.04.2016

Revis.: 2.0 - 30.05.2017

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de
fer (Regulations Concerning the International Transport of Dangerous Goods by Rail )
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

Relevant H and EUH statements (number and full text)

H304 May be fatal if swallowed and enters airways.
H413 May cause long lasting harmful effects to aquatic life.
EUH210 Safety data sheet available on request.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data.

The above information describes exclusively the safety requirements of the product and is based on our
present-day knowledge. The information is intended to give you advice about the safe handling of the product
named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be
transferred to other products. In the case of mixing the product with other products or in the case of
processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety
data sheet.)