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

1.1. Product identifier
Rhepanol-Grundierung sk-L

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

Use of the substance/mixture
Adhesive

Uses advised against
Only use for the intended purpose.
The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet
Company name: FDT Flachdach Technologie GmbH & Co. KG
Street: Eisenbahnstraße 6-8
Place: D-68199 Mannheim
Telephone: +49 (621) 8504100 Telefax: +49 (621) 8504200
e-mail: kundenservice@fdt.de
Contact person: Marco Anderer Telephone: +49 (621) 8504563
e-mail: marco.anderer@fdt.de
Internet: http://www.fdt.de
Responsible Department: Arbeitssicherheit und Umweltschutz

1.4. Emergency telephone
number: Poison Control Center (Mayence, GER)
+49 (0)6131-19240 (24h - de, en)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

2.2. Label elements
Hazardous components which must be listed on the label
n-butyl acetate
Naphtha (petroleum), hydrotreated light

Signal word: Danger

Pictograms:

Hazard statements
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use explosion-proof electrical/ventilating/lighting equipment.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.

2.3. Other hazards

The components in this mixture do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n-butyl acetate</td>
<td>25-&lt;50%</td>
</tr>
<tr>
<td></td>
<td>123-86-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
</tr>
<tr>
<td></td>
<td>204-658-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
</tr>
<tr>
<td></td>
<td>64742-49-0</td>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>10-&lt;20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>265-151-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90622-57-4</td>
<td>Iso-Alkanes (C9-12)</td>
<td>2,5-&lt;10%</td>
</tr>
<tr>
<td></td>
<td>292-459-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flam. Liq. 3, STOT SE 3; H226 H336 EUH066</td>
<td></td>
</tr>
</tbody>
</table>

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

Further Information

benzene contents <01, % - solvent naphtha: according to CLP, Annex VI, Tab. 3.2: Carc.Cat. 2, Muta.Cat. 2, Xn; Annotation P: benzene contents <0,1%, Carc.Cat. 2 + Muta.Cat. 2 not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
In case of troubles or persistent symptoms, consult an doctor/physician.
Remove persons from danger area and lie them down. Never orally infuse something to an unconscious person. No special first aid measures necessary. A vomiting, supine person must be brought into recovery position.

After inhalation
Provide fresh air. In case of respiratory tract irritation, consult a physician.
In case of irregular breathing or respiratory arrest, perform artificial respiration.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. Call a physician immediately.
After contact with eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

After ingestion
Rinse mouth, spit liquid again. Do NOT induce vomiting. Let water be drunk in little sips (dilution effect). Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed
After skin contact: Irritation and reddening.
May cause damage to organs through prolonged or repeated exposure.

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
Thermal decomposition can lead to harmful gases and vapours.

5.3. Advice for firefighters
Co-ordinate fire-fighting measures to the fire surroundings. Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information
Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Keep away from sources of ignition - No smoking. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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. Provide adequate ventilation.

6.4. Reference to other sections
Safe handling: see section 7
Personal precautions: refer to section 8.
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Provide adequate ventilation as well as local exhaust at critical locations. Handle and open container with care.
Advice on protection against fire and explosion
Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Store only in original container. Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)
Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-86-4</td>
<td>Butyl acetate</td>
<td>150</td>
<td>724</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200</td>
<td>966</td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

DNEL/DMEL values

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>Exposure route</th>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-86-4</td>
<td>n-butyl acetate</td>
<td>inhalation</td>
<td>Consumer</td>
<td>859,7 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DNEL, acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Worker</td>
<td>960 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DNEL, long-term</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Worker</td>
<td>300 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DNEL, long-term</td>
<td></td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>oral</td>
<td>Consumer</td>
<td>699 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DNEL, acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Worker</td>
<td>300 mg/kg bw/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DNEL, long-term</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Consumer</td>
<td>447 mg/m³</td>
</tr>
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<td></td>
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<td>DNEL, acute</td>
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<td></td>
<td>Worker</td>
<td>2035 mg/m³</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>DNEL, long-term</td>
<td></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>123-86-4</td>
<td>n-butyl acetate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freshwater</td>
<td></td>
<td>0,18 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td></td>
<td>0,018 mg/l</td>
</tr>
<tr>
<td></td>
<td>Freshwater (intermittent releases)</td>
<td></td>
<td>0,36 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td></td>
<td>0,0903 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td></td>
<td>0,0981 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Freshwater sediment</td>
<td></td>
<td>0,981 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Micro-organisms in sewage treatment plants (STP)</td>
<td></td>
<td>35,6 mg/l</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Protective and hygiene measures
- Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Avoid skin, eye and clothing contact. After contact with skin, wash immediately with plenty of water and soap or a suitable cleaning agent.

Eye/face protection
- Tighty fitting safety glasses with side shields. (DIN EN 166)

Hand protection
- Protect skin by using skin protective cream. Wear suitable gloves.
- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
- 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.
- Suitable material: FKM (fluoro rubber)

Skin protection
- Full cover clothing covering arms and legs.

Respiratory protection
- Use protective filter mask in case of short-term and low exposure; in case of intense or longer exposure, use respiratory protection device operating independently from circulating air.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | liquid |
| Colour:         | according to product description |
| Odour:          | characteristic |

Test method

pH-Value: not determined

Changes in the physical state

| Melting point: | not determined |
| Initial boiling point and boiling range: | 78 °C |
| Flash point: | -9 °C |
| Flammability |
Gas: 
海口 determined

Explosive properties
The product is not explosive, however, formation of explosive mixtures are possible.

Lower explosion limits: 0.6 vol. %
Upper explosion limits: 7.7 vol. %
Ignition temperature: 200 °C

Auto-ignition temperature
Gas: not determined

Decomposition temperature: not determined

Oxidizing properties
not determined

Vapour pressure: 61 hPa
(at 20 °C)
Density (at 20 °C): 0.9 g/cm³ ISO 2811
Water solubility: insoluble
Partition coefficient: not determined
Viscosity / dynamic: 550 mPa·s ISO 2555
(at 20 °C)
Viscosity / kinematic: not determined
Vapour density: not determined
Solvent content: 59.0 %

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reactivity under regular conditions.

10.2. Chemical stability
The product is stable under regular conditions.

10.3. Possibility of hazardous reactions
No known hazardous reactions.

10.4. Conditions to avoid
No information available.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
Pyrolysis products, toxic. chlorine compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.
### Exposure routes, Method, Dose, Species, Source

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-86-4</td>
<td>n-butyl acetate</td>
<td>LD50</td>
<td>13100 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt;17600 mg/kg</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>&gt;21 mg/l</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>64742-49-0</td>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>LD50</td>
<td>&gt;5840 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt;2920 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
<tr>
<td>90622-57-4</td>
<td>Iso-Alkanes (C9-12)</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt;5000 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
</tbody>
</table>

### Irritation and corrosivity

Causes skin irritation.

### Sensitising effects

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

### STOT-single exposure

May cause drowsiness or dizziness. (n-butyl acetate), (Naphtha (petroleum), hydrotreated light)

### Severe effects after repeated or prolonged exposure

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.

### Aspiration hazard

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

### SECTION 12: Ecological information

#### 12.1. Toxicity

Harmful to aquatic life with long lasting effects.

n-butyl acetate (CAS No. 123-86-4):
EC10: 959 mg/l (Pseudomonas putida)
EC50:(18h) 959 mg/l (Pseudomonas putida)
EC50:(24h) 72.8 mg/l (Daphnia magna)
EC50:(72h) 674 mg/l (Scenedesmus subspicatus)
LC50:(96h) 62 mg/l (Leuciscus idus (golden orфе))
12.2. Persistence and degradability
No data available.

12.3. Bioaccumulative potential
No data available.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
The components in this mixture do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects
No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal
Disposal according to official regulations.
Consult the local waste disposal expert about waste disposal. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste disposal number of waste from residues/unused products
080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other dangerous substances
Classified as hazardous waste.

Contaminated packaging
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Classification code: F1
Special Provisions: 640D
Limited quantity: 5 L
Excepted quantity: E2
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)
14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Classification code: F1
Special Provisions: 640D
Limited quantity: 5 L
Excepted quantity: E2

Marine transport (IMDG)
14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Special Provisions: -
Limited quantity: 5 L
Excepted quantity: E2
EmS: F-E, S-D

Air transport (ICAO)
14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
**A3 Special Provisions:**
- Limited quantity Passenger: 1 L
- Passenger LQ: Y341
- Excepted quantity: E2

**IATA-packing instructions - Passenger:**
- 353

**IATA-max. quantity - Passenger:**
- 5 L

**IATA-packing instructions - Cargo:**
- 364

**IATA-max. quantity - Cargo:**
- 60 L

**14.5. Environmental hazards**

**ENVIRONMENTALLY HAZARDOUS:** no

**14.6. Special precautions for user**

**Warning:** Flammable liquids

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

not applicable

**SECTION 15: Regulatory information**

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

**EU regulatory information**

**2004/42/EC (VOC):** 530,0 g/l

**Additional information**

- Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: not applicable
- Regulation (EC) No. 648/2004 (Detergents regulation): not applicable
- REGULATION (EC) No 850/2004 on persistent organic pollutants: not applicable
- REGULATION (EC) No 689/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and import of dangerous chemicals: This mix contains no chemicals that are subject to the export notification procedures (annex 1).
- This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none
- This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

**National regulatory information**

**Water contaminating class (D):** 1 - slightly water contaminating

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Changes**

Version 1,00 - Creation - 11.08.2015

**Abbreviations and acronyms**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- CAS: Chemical Abstracts Service
- EC: Effective Concentration
Safety Data Sheet

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EG: European Community (Europäische Gemeinschaft)
EN: European Norm
IATA: International Air Transport Association
IBC Code: International Code for the Construction and Equipment of ships carrying Dangerous
Chemicals in Bulk
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
CLP: Classification, Labeling, Packaging
IUCLID: International Uniform ChemicaL Information Database
LC: Lethal concentration
LD: Lethal dose
log Kow: Octanol/water partition coefficient
MARPOL: Maritime Pollution Convention = Convention for the Prevention of Maritime Pollution from
Ships
OECD: Organisation for Economic Co-operation and Development
PBT: Persistent, bio-cumulative, toxic
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail
TRGS: Technische Regeln für Gefahrstoffe
VOC: Volatile Organic Compounds
vPvB: very persistent and very bio-cumulative
VwVwS: Administrative Regulation for Water Pollutants
WGK: German Water Hazard Class
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
TLV: Threshold Limiting Value
STOT: Specific Target Organ Toxicity

Relevant H- and EUH-phrases (Number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.
EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

The information given in this safety data sheet is to describe the product's safety regulations. It is not
for guaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was
generated upon information of pre-suppliers by:

REACheck Solutions GmbH, Mühlstraße 94a, 63741 Aschaffenburg, Germany
Phone: +49 (0)6021 - 1 50 86-0, Fax: +49 (0)6021 - 1 50 86-77, E-Mail: eu-sds@reacheck.eu,
www.reacheck.eu

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