Trennmittel QZ 5111

1. Identification of the substance/preparation and of the company undertaking

1.1 Identification of the substance
or preparation: Trennmittel QZ 5111

1.2 Use of the substance/preparation:
Releasing agent for mold and tool construction and used in foundries

1.3 Company/undertaking identification

Company name: Gößl + Pfaff GmbH
Street: Münchener Str. 13
Place: 85123 Karlskron/Brautlach
Telephone: +49 (0) 8450 / 932-0
Fax: +49 (0) 8450 / 932-13
Contact person: Management: Mr. Gößl, Mr. Pfaff
E-Mail: info@goessl-pfaff.de
Internet: www.goessl-pfaff.de

1.4 Emergency telephone number: +49 (0) 8450 / 932-0
Opening times
Monday till Thursday: 8.00 a.m.- 5.00 p.m.
Friday: 8.00 a.m.- 3.00 p.m.

2. Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment
R phrases:
Highly flammable.
Irritating to skin.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Harmful: may cause lung damage if swallowed.
Vapours may cause drowsiness and dizziness.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Aspiration hazard: Asp. Tox. 1
Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label
Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane
Hydrocarbons C7-C9, n-alkanes, isoalkanes, cyclenes
Cyclohexane
n-hexane
### 3. Composition/information on ingredients

#### 3.2. Mixtures

**Chemical characterization**
Wax dispersion, contents solvents

**Hazardous components**

<table>
<thead>
<tr>
<th>EC No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>921-024-6</td>
<td>Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, &lt;5% n-hexane</td>
<td>50 - 75%</td>
</tr>
<tr>
<td>01-2119475514-35</td>
<td>Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411</td>
<td></td>
</tr>
<tr>
<td>920-750-0</td>
<td>Hydrocarbons C7-C9, n-alkanes, isoalkanes, cyclenes</td>
<td>10 - 20%</td>
</tr>
<tr>
<td>01-2119473851-33</td>
<td>Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411</td>
<td></td>
</tr>
<tr>
<td>203-806-2</td>
<td>cyclohexane</td>
<td>5 - &lt; 10%</td>
</tr>
<tr>
<td>110-82-7</td>
<td>F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment</td>
<td>R11-65-38-67-50-53</td>
</tr>
<tr>
<td>601-017-00-1</td>
<td>Flam. Liq. 2, Asp. Tox. 1, Skin Irrit. 2, STOT SE 3, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H225 H304 H315 H336 H400 H410</td>
<td></td>
</tr>
<tr>
<td>203-777-6</td>
<td>n-hexane</td>
<td>1 - &lt; 3%</td>
</tr>
<tr>
<td>601-037-00-0</td>
<td>Flam. Liq. 2, Repr. 2, Asp. Tox. 1, STOT RE 2, Skin Irrit. 2, STOT SE 3, Aquatic Chronic 2; H225 H361f *** H304 H373 ** H315 H336 H411</td>
<td></td>
</tr>
</tbody>
</table>

Full text of R-, H- and EUH-phrases: see section 16.
4. First aid measures

4.1. Description of first aid measures

General information
Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice. If unconscious place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

After inhalation
Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical advice immediately. Provide fresh air.

After contact with skin
Change contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Clean with detergents. Avoid solvent cleaners.

After contact with eyes
In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically. After ingestion: Give activated carbon, in order to reduce the resorption in the gastro-enteric tract. Caution if victim vomits: Risk of aspiration!

5. Fire-fighting measures

5.1. Extinguishing media
Suitable extinguishing media

Extinguishing media which must not be used for safety reasons
High power water jet.

5.2. Special hazards arising from the substance or mixture
Special exposure hazards arising from the substance itself, combustion products, resulting gases:
Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx).

5.3. Advice for firefighters
Use water spray jet to protect personnel and to cool endangered containers. Do not allow water used to extinguish fire to enter drains or waterways. Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information
Do not allow water used to extinguish fire to enter drains or waterways.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety. See protective measures under point 7 and 8.

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
Take up mechanically. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean with detergents. Avoid solvent cleaners. Treat the recovered material as prescribed in the section on waste disposal.
7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Only use the material in places where open light, fire and other flammable sources can be kept away. Take precautionary measures against static discharges. Use only antistatically equipped (spark-free) tools. Wear antistatic work clothing. Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray. When using do not eat, drink, smoke, sniff. Wear personal protection equipment. See section 8.

Advice on protection against fire and explosion
Concentrated vapours are heavier than air. Vapours may form explosive mixtures with air.

Further information on handling
Never use pressure to empty container.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Take precautionary measures against static discharges. Keep the packing dry and well sealed to prevent contamination and absorption of humidity. When using do not smoke. Access is only to be granted to authorised personal.

Advice on storage compatibility
Materials to avoid: Acid. Base. Oxidizing agents.

Further information on storage conditions
Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Keep away from sources of ignition. - No smoking. Keep/Store only in original container. storage temperature: of °C: +10 up to °C: +30. Do not empty into drains.

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>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-82-7</td>
<td>Cyclohexane</td>
<td>100</td>
<td>350</td>
<td></td>
<td>TWA (8h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>300</td>
<td>1050</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
<tr>
<td>110-54-3</td>
<td>n-Hexane</td>
<td>20</td>
<td>72</td>
<td></td>
<td>TWA (8h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Occupational exposure controls
Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. In case of insufficient ventilation, wear suitable respiratory equipment. Suitable respiratory protective equipment: A

Protective and hygiene measures
Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Respiratory protection
Respiratory protection necessary at: aerosol or mist generation. In the case of the formation of dust. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: A

Hand protection
Tested protective gloves are to be worn:
Before using check leak tightness / impermeability. Barrier creams are not substitutes for body protection.

Eye protection
Tightly sealed safety glasses.
Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Wear antistatic work clothing. (Natural fibres (e.g. cotton), heat-resistant synthetic fibres). Avoid contact with skin, eyes and clothes. Take off immediately all contaminated clothing. Wash hands before breaks and after work. Protect skin by using skin protective cream.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>whitish</td>
</tr>
<tr>
<td>Odour:</td>
<td>white-spirit</td>
</tr>
</tbody>
</table>

**Changes in the physical state**

- **Initial boiling point and boiling range:** 78 - 113 °C
- **Flash point:** -9 °C
- **Lower explosion limits:** 0.6 (hydrocarbons C7-C9) vol. %
- **Upper explosion limits:** 7.7 (hydrocarbons C6-C7) vol. %
- **Ignition temperature:** ca. 250 °C
- **Vapour pressure:** ca. 290 hPa
- **Density (at 20 °C):** 0.71 g/cm³
- **Water solubility:** 0 g/L
- **Viscosity / dynamic:** ca. 30 mPa·s
- **Viscosity / kinematic:** 7 - 20 mm²/s
- **Flow time:** 26s
- **Solvent content:** 94%

**Test method**

- **Flash point, open cup:** DIN EN ISO 2719
- **Flash point, closed cup:** DIN EN ISO 2811-1
- **Flash point:** DIN EN ISO 3219
- **Flash point:** DIN EN ISO 51562
- **Flash point:** DIN 53211

9.2. Other information

| Solid content: | 6% |

10. Stability and reactivity

10.4. Conditions to avoid

Materials to avoid: Alkalis (alkalis), concentrated. Acid, concentrated. Oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.: Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx).
11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, &lt;5% n-hexane</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 5840 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2920 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>&gt; 25 mg/l</td>
<td>Rat</td>
<td>OECD 403</td>
</tr>
<tr>
<td></td>
<td>Hydrocarbons C7-C9, n-alkanes, isoalkanes, cyclenes</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 5000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2800 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>23,3 mg/l</td>
<td>Rat</td>
<td>OECD 403</td>
</tr>
<tr>
<td>110-82-7</td>
<td>cyclohexane</td>
<td>oral</td>
<td>LD50</td>
<td>&gt; 5000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>14 mg/l</td>
<td>Rat</td>
<td>OECD 403</td>
</tr>
<tr>
<td>110-54-3</td>
<td>n-hexane</td>
<td>oral</td>
<td>LD50</td>
<td>5000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rabbit</td>
<td>OECD 402</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>172 mg/l</td>
<td>Rat</td>
<td>OECD 403</td>
</tr>
</tbody>
</table>

Empirical data on effects on humans
Prolonged/repetitive skin contact may cause skin defattening or dermatitis. Frequently or prolonged contact with skin may cause dermal irritation.

Further information
There are no data available on the preparation/mixture itself. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

12. Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Method</th>
<th>Dose</th>
<th>h</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, &lt;5% n-hexane</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>11,4 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>30 mg/l</td>
<td>72 h</td>
<td>green alga</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>3 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hydrocarbons C7-C9, n-alkanes, isoalkanes, cyclenes</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>&gt; 13,4 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>30 mg/l</td>
<td>96 h</td>
<td>green alga</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>3 mg/l</td>
<td>48 h</td>
<td>Daphnia magna</td>
<td></td>
</tr>
</tbody>
</table>
### 13. Disposal considerations

#### 13.1. Waste treatment methods

**Advice on disposal**

Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

- **070704** WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

- **150104** WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

**Contaminated packaging**

Completely emptied packages can be recycled.

### 14. Transport information

#### Land transport (ADR/RID)

- **14.1. UN number:** 1993
- **14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane, Hydrocarbons C7-C9, n-alkanes, isoalkanes, cyclenes)
- **14.3. Transport hazard class(es):** 3
- **14.4. Packing group:** II

**Hazard label:**

![Hazard label](image)

- **Classification code:** F1
- **Special Provisions:** 274 601 640D
- **Limited quantity:** 1 L
- **Transport category:** 2
15. Regulatory information

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

**EU regulatory information**

999/13/EC (VOC): 94 % (667.4 g/l)

**National regulatory information**

Water contaminating class (D): 2 - water contaminating
16. Other information

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

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Further Information

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.