01. Identification of the substance / mixture and of the company:

Trade name: Nickel Test sensitive

Company: Squarix GmbH
Elbestraße 10
D-45768 Marl
phone +49(0)2365-20400-0, out of business hours: +49(0)173-9550818
Fax +49(0)2365-20400-60
e-mail: info@squarix.de

02. Hazards identification:

2.1 Classification of the substance or mixture

2.1.1 Classification according to REGULATION (EC) No 1272/2008
irritant effect on the skin, category 1B, H315; H318;

Classification according to Directive 67/548 / EEC or Directive 1999/45 / EC C, R36 / 37/38

2.2 Label elements according to REGULATION (EC) No 1272/2008

Hazard pictograms:

word: Danger

Hazard statements:
H315: Causes skin irritation.
H318: Causes serious eye damage.
H335 May cause respiratory irritation.

Safety instructions:
Prevention:
P102: Keep out of the reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
P264: Wash hands thoroughly after handling.
P301 + P330 + P331: IF SWALLOWED: rinse mouth. DO NOT induce vomiting.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if possible. Continue rinsing.
P310: Call a doctor immediately.
P403 + P235: Store in a cool, well-ventilated place.

Response: none

Other Labeling: none

2.3 Label elements according to Directive 67/548 / EEC or Directive 1999/45 / EC

Symbol(s):

R-phrases
R36/37/38 Irritating to eyes, respiratory system and skin
R41 Risk of serious damage to eyes

S-phrases
S2 Keep out of the reach of children
S24/25 Avoid contact with eyes and skin
S45 In case of accident or if you feel unwell Immediately seek medical attention (if possible, show this label)

Additional information:
no

Additional hazard information
for man and environment:
no
03. Composition / information on ingredients:

3.1 Chemical characterization: mixture of liquid ethanol - ammonia - water.

3.2 Dangerous ingredients:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Weight-%</th>
<th>Classification Regulation (EC) 1272/2008</th>
<th>Classification RL 67/548/EEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia in aqueous solution</td>
<td>1336-21-6</td>
<td>5-10</td>
<td>Acute Tox. 4, oral; H302 Skin Corr. 1B; H314 STOT SE 3; H335 Aquatic Acute 1; H400</td>
<td>C; R34 N, R50</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5; 200-578-6</td>
<td>5</td>
<td>Flam Liq. 2; H225</td>
<td>F, R11</td>
</tr>
</tbody>
</table>

Full text of H- and R-phrases are listed in Section 16.

Substances hazardous to health in accordance with Directive 67/548 / EEC in conjunction with Directive 1999/45 / EC and in accordance with Regulation (EC) 1272/2008:

See above.

Substances not mentioned in section 3.2, but with a limit value assigned to them:

none.

Additional information:

none

04. First aid measures:

4.1 General instructions: - Remove contaminated, soaked clothing immediately and remove safely.

4.1.1 Eye contact: - Wash eyes with running water for several minutes with open eyelid and seek medical attention immediately.

4.1.2 Skin contact: - In case of contact with skin, wash immediately with plenty of soap and water and, if necessary, apply nourishing skin cream (eg STOKOLAN®).

4.1.3 Ingestion: - Allow plenty of water to drink and do not induce vomiting. Call a doctor immediately.

4.1.4 Inhalation: - Remove affected person to fresh air and keep calm. In the event of symptoms take medical treatment.

05. Fire-fighting measures:

5.1 Geeignete Löschmittel: - In the event of an environmental fire, water spray, CO2, extinguishing powder or alcohol-resistant foam may be used.

5.2 Extinguishing media which must not be used for safety reasons:

- Cool the fire-exposed container with water.

 unknown

5.3 Special hazards caused by the substance, its products of combustion or resulting gases: - In case of heat formation of nitrogen oxides.

5.4 Special protective equipment for fire-fighters: - none

06. Accidental release measures:

6.1 Personal protective measures: - Supply fresh air.

6.2 Environmental precautions: - Do not discharge into drains / surface water / groundwater.

6.3 Methods for cleaning up / taking up: - Handling and storage Pick up mechanically. Absorb with liquid-binding neutral material (sand, kieselguhr, universal binder, sawdust)
07. Handling and storage:

7.1 Handling:

Handling according to the leaflet. The procedures for loading, unloading and handling may only be carried out by qualified personnel, in which case the inhalation of vapors must be avoided at all costs. Use suitable protective equipment to prevent contact with skin and eyes.

7.2 Storage:
Packaging and reaction solution tightly closed, dry, at +10 to +25 °C. Keep out of reach of children. Do not empty into drains. Protect from moisture.

Storage class (VCI): 10

08. Exposure controls and personal protection:

8.1 Control Parameters
8.1.1. Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Limit type (Country of Origin)</th>
<th>Agent</th>
<th>CAS-No.</th>
<th>Limits</th>
<th>Peak limitation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGW</td>
<td>Ammonia</td>
<td>1336-21-6</td>
<td>14</td>
<td>20</td>
<td>DFG</td>
</tr>
<tr>
<td>AGW</td>
<td>Ethanol</td>
<td>64-17-5</td>
<td>960</td>
<td>500</td>
<td>DFG</td>
</tr>
</tbody>
</table>

- Personal Protective Equipment:
  - none
  - Pay attention to the usual precautionary measures for handling chemicals.

09. Physical and chemical properties:

- Form (25° C): liquid
- Colour: clear
- Odor: pungent
- Flash point: >60 °C
- Ignition temperature: not determined
- Explosive limits (lower): not determined
- Melting point: not determined
- Density (20° C): not determined
- Solubility in water: readily soluble in water
- Bulk density (25° C, uncompacted): not determined
- pH value (20° C): approx. 11
10. Stability and reactivity:

10.1 Reactivity: - stable.
10.2 Stability: - Stable under normal storage conditions
10.3 Hazardous reactions: - With strong alkalis, oxidizing agents and acids
10.4 Conditions to avoid: - Protect from heat sources
10.5 Incompatible materials: - none
10.6 Hazardous decomposition products: - Upon thermal decomposition, the product releases toxic NOx fumes

11. Toxicological information:

11.1 Acute oral toxicity: - LD_{50} rat: none
11.2 Inhalatic toxicity: - not determined
11.3 Chronic toxicity: - not determined
11.4 Irritating effect: - skin irritating
                       - eye irritating

12. Ecological information:

12.1 General notes: - Water hazard class 1 - slightly hazardous for water (self-classification).
                   - Do not allow to enter groundwater, waters or sewers.
                   - Do not allow undiluted into the sewage or into the receiving water.

Further information: - Do not breathe

13. Disposal considerations:

Product:
Empfehlung: Chemicals must be disposed of in compliance with the respective national regulations. After use, dispose of proper disposal. Chopsticks can be disposed of with household waste. Unused reaction solution cannot get into the wastewater. Treat as a chemical waste and have it disposed of at a suitable recycling station.

Packaging: Packaging must be disposed of in a country-specific manner in accordance with the relevant regulations or be handed over to take-back systems.

14. Transport information:

Product is not a hazardous material in terms of transport regulations.

15. Regulatory information:

National regulations: Major accident regulations: not applicable
Water hazard class: Water hazard class 1 - slightly hazardous for water
16. Other information:

16.1 *Full text of R-phrases / H-phrases / symbols*

**Classification Regulation (EG) 1272/2008**

- Acute toxicity, category 4, Ingestion; H302
- Serious eye damage and skin irritation, category 1B; H315, H318
- Specific Target Organ Toxicity (single exposure), Category 3; H335
- Acutely hazardous to waters, category 1; H400
- Flammable liquids; Category 2; H225

**Classification RL 67/548 / EEG**

<table>
<thead>
<tr>
<th>R 11</th>
<th>Highly flammable</th>
</tr>
</thead>
<tbody>
<tr>
<td>R 36/37/38</td>
<td>Irritating to eyes, respiratory system and skin</td>
</tr>
<tr>
<td>R 41</td>
<td>Risk of serious damage to eyes</td>
</tr>
<tr>
<td>R 50</td>
<td>Very toxic to aquatic organisms</td>
</tr>
</tbody>
</table>

**Issue: 0001**

Some of the information in Chapters 4 to 8 and 10 to 12 are not related to the use and the proper use of the product (see user / technical information), but to the release of large quantities in the event of accidents and irregularities.

The information contained in this safety data sheet is based on the knowledge available at the time of preparation. The delivery specification can be found in the respective product data sheets.

The description of the product is only in relation to health and safety requirements. This document does not guarantee specific properties or specifications.

(Na - not applicable, nb - not determined).