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

1.1 Product identifier
Product name: TRITAL-Fix
Article: 5910
Identification of substance: -
Identification of mixture: Cristalline mixture of sodium hydroxide and dodecylbenzenesulfonate
Registration number: See section 3 for substances contained in the mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against
Cleaning supplies for the beverage industry

1.3 Details of the supplier of the safety data sheet
Company: C. Schliessmann Kellerei-Chemie GmbH & Co KG
Auwiesenstr. 5, D-74523 Schwäbisch Hall
Tel. 0049-(0)791 / 97191 -0, Fax -25
E-Mail: service@c-schliessmann.de

1.4 Emergency telephone number
Poison centre Freiburg: Tel. 0049-(0)761 / 19240

2. Hazards identification

2.1 Classification of the substance or mixture
Skin Corr. 1A H314 Causes severe skin burns and eye damage.

2.2 Label elements according to Regulation (EC) No 1272/2008
Hazard pictograms:

Signal word: DANGER

Hazardous component: sodium hydroxide, dodecylbenzenesulfonate

Hazard statements: H314 Causes severe skin burns and eye damage.

Precautionary statements: P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower).
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER / doctor.

2.3 Other hazards
Corrosive to light metals
3. Composition/information on ingredients

3.1 Substance

The product is a mixture.

3.2 Mixtures

Mixture of substances listed below.

**Dangerous component:** sodium hydroxide
**EC Number:** 215-185-5
**CAS:** 1310-73-2
**Reg.nr.:** 01-2119457892-27-XXXX
**Classification:** Met. Corr. 1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.

**Content:**
50-80%

**Dangerous component:** Sodium dodecylbenzenesulfonate
**EC Number:** 246-680-4
**CAS:** 25155-30-0
**Reg.nr.:** -
**Classification:** Acute Tox., oral 2 H302 Harmful if swallowed
Skin Corr. 2 H315 May be corrosive to metals.
Eye Dam. 1 H318 Causes serious eye damage.

**Content:** <5%

4. First aid measures

4.1 Description of first aid measures

**After inhalation:**
Supply fresh air. In cases of doubt or irritating symptoms seek medical advice.

**After skin contact:**
Wash with plenty of water, remove dirty clothing immediately. Medical treatment in case of corrosive injuries.

**After eye contact:**
Flush opened eye for at least 10 minutes under running water holding eyelids apart. Immediately consult a doctor.

**After swallowing:**
Rinse out mouth and drink 2 glasses of water, do not induce vomiting (risk of perforation!). Call for a doctor immediately. No attempt to neutralize.

4.2 Most important symptoms and effects, both acute and delayed

**After inhalation:** Respiratory irritations, cough, breathlessness

**After skin contact:** Irritant and caustic effects, necrosis

**After eye contact:** Burns, necrosis, Risk of blindness!

**After swallowing:** Burns. Risk of perforation in the esophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Firefighting measures

5.0 Combustibility

The product is not combustible.

5.1 Suitable extinguishing agents

Foam, powder, CO₂ or water spray

5.2 Special hazards arising from the substance or mixture

Risk of explosion by hydrogen gas formation on contact with light metals; risk of formation of dangerous combustion gasses (carbon-, sulfur- and phosphor oxides)

5.3 Advice for firefighters

Extinguishing activities according to the environment; wear self-contained respiratory protective device, avoid skin contact.
6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid substance contact. Avoid dust formation. Don’t breathe dusts, aerosols and fumes.

6.2 Environmental precautions
Dilute with plenty of water. Do not allow to enter sewers/ground water or penetrate the soil.

6.3 Methods and material for containment and cleaning up
Take up mechanically and arrange removal by disposal company. Clean up with water.

6.4 Reference to other sections
See Section 13 for disposal information.

7. Handling and storage

7.1 Precautions for safe handling
See notes in Section 2 and 8. Be cautious during pouring the product into water, development of heat!

7.2 Conditions for safe storage, including any incompatibilities
Keep well closed at 15-25°C, not in metal tins or containers; separated from acids and foods.

7.3 Specific end use(s)
See section 1.2

8. Exposure controls/personal protection

8.1 Control parameters
WEL (Great Britain):

Short-term value sodium hydroxide: 2 mg/m³

8.2 Exposure controls
Personal protective equipment:
Respiratory protection: When dusts/vapours are generated, particulate filter P2.
Eye protection: Safety goggle with side protection.
Skin protection: Protective gloves made of nitrile rubber thickness 0,35mm.
General hygiene considerations: Change contaminated clothing. Preventive skin protection. Wash hands after working.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid, cristalline</td>
</tr>
<tr>
<td>Colour</td>
<td>Powder, consisting of colourless or white particles</td>
</tr>
<tr>
<td>Odour</td>
<td>Weak for cleaning supplies</td>
</tr>
<tr>
<td>pH-value</td>
<td>ca. 12-13 (20°C)</td>
</tr>
<tr>
<td>Melting temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density of the powder</td>
<td>0,995 g/cm³ (20°C)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

10.1 Reactivity
See section 10.3 and 7.1.

10.2 Chemical stability
No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions
Risk of explosion, formation of hydrogen gas when in contact with light metals, violent reaction with acids

10.4 Conditions to avoid
Heating and direct sunlight.

10.5 Incompatible materials
Various metals (aluminium, zinc, tin)

10.6 Hazardous decomposition products
In case of fire: see section 5.
## 11. Toxicological information

### 11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity (sodium hydroxide):</th>
<th>2000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 (oral, rat):</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity (dodecylbenzenesulfonate):</td>
<td>440 mg/kg</td>
</tr>
<tr>
<td>LD50 (oral, rat):</td>
<td></td>
</tr>
</tbody>
</table>

Subacute/chronic toxicity of the product: No sensitizing effects known.

CMR effects:
- Mutagenicity: Ames-test and tests with animal cells didn’t show any mutagenic or teratogenic effects.
- Carcinogenicity: No classification as carcinogenic toxicant.
- Reproductive toxicity: No classification as reproductive toxicant.

### 11.2 Further information

See section 4 for symptoms after direct contact with the product; Corrosive to the skin and mucous membranes of the eyes and respiratory tract. Can cause blindness. Causes deep skin necrosis during extended skin contact. Perforation of the esophagus and stomach.

## 12. Ecological information

### 12.1 Aquatic toxicity

<table>
<thead>
<tr>
<th>Sodium hydroxide:</th>
<th>LC50 (96h) 125 mg/l (mosquito fish); Dodecylbenzenesulfonate: LC50 (96h) approx. 5 mg/l (rainbow trout); damaging effect due to pH shift.</th>
</tr>
</thead>
</table>

### 12.2 Persistence and degradability

Sodium hydroxide will be neutralized by reaction with carbon dioxide.

### 12.3 Bioaccumulative potential

Dodecylbenzenesulfonate: Lepomis macrochirus -28d: 64µg/l; bioconcentration factor (BCF): 220.

### 12.4 Mobility in soil

The product is soluble in water.

### 12.5 Results of PBT and vPvB assessment

Not considered as persistent or bioaccumulative.

### 12.6 Other adverse effects

No further relevant information available.

## 13. Disposal considerations

Product must be disposed of as hazardous waste. Disposal according to official regulations. Little quantities may be rinsed away with plenty of water and diluted after careful neutralization with diluted acid.

## 14. Transport information

### 14.1 UN-Number

ADR, IMDG, IATA: UN 3262

### 14.2 UN proper shipping name

ADR: 3262 CORROSIVE SOLID; BASIC; INORGANIC, N.O.S.; SODIUM HYDROXIDE

IMDG, IATA: CORROSIVE SOLID; BASIC; INORGANIC, N.O.S.; SODIUM HYDROXIDE

### 14.3 Transport hazard class(es)

ADR: Class 8 / Corrosive substances, Label 8 classification code C6

Transport category 3 / LQ24 / 5kg

IMDG: Class 8 / Corrosive substances, Label 8

EmS: F-A S-B

IATA: Class 8 / Corrosive substances, Label 8

### 14.4 Packing group

ADR, IMDG, IATA: III
### 14.5 Environmental hazards

Marine pollutant: No

### 15. Regulatory information

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

Information about limitation of use: Employment restrictions for juveniles and pregnant women must be observed.

- Waterhazard class: 1 (slightly hazardous for water)
- Lagerklasse VCI: 8B

#### 15.2 Chemical Safety Assessment

Has not been carried out for this product.

### 16. Other information

The informations provided on this MSDS are correct to the best of our knowledge and information. These informations are designed as a guide for safe handling. They are no guarantee for specific characteristics of the product.