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

1.1. Product identifier

Name of product

Harzlöser

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

Recommended intended purpose(s)

Removing of resin

1.3. Details of the supplier of the safety data sheet

Manufacturer

F.W.Klever
Hauptstraße 20, D-84168 Aham
Phone +49 (0) 8744 96 99 10, Fax + 49 (0) 8744 96 99 96
E-Mail info@ballistol.de
Internet www.ballistol.de

Advice

Qualitätssicherung
Phone +49 (0) 8744 96 99 30
E-mail (competent person):
info@ballistol.de

1.4. Emergency telephone number

Emergency advice

Dr.Zettler (Werktags von 8.00 Uhr bis 16.00 Uhr)
Phone +49 (0) 8744 96 99 30
This number is only available at office times.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

Xi; R36/38

R-phrases

36/38 Irritating to eyes and skin.

Additional hints

To be kept away from children

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

<table>
<thead>
<tr>
<th>Hazard classes and Hazard categories</th>
<th>Hazard Statements</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irrit. 2</td>
<td>H315</td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>H319</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hazard statements for health hazards

H315 Causes skin irritation.
H319 Causes serious eye irritation.
2.2. Label elements
Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

GHS07

Signal word
Warning

Hazard statements for health hazards
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary Statements

<table>
<thead>
<tr>
<th>! Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.</td>
</tr>
<tr>
<td>P264 Wash hands thoroughly after handling.</td>
</tr>
<tr>
<td>P280 Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>! Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</td>
</tr>
<tr>
<td>P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.</td>
</tr>
<tr>
<td>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P312 Call a POISON CENTER or doctor/physician if you feel unwell.</td>
</tr>
<tr>
<td>P332 + P313 If skin irritation occurs: Get medical advice/attention.</td>
</tr>
<tr>
<td>P337 + P313 If eye irritation persists: Get medical advice/attention.</td>
</tr>
<tr>
<td>P362 Take off contaminated clothing and wash before reuse.</td>
</tr>
</tbody>
</table>

! Storage
P405 Store locked up.

2.3. Other hazards

No information available.

SECTION 3: Composition/ information on ingredients

3.1. Substances
not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>CAS No</th>
<th>EC No</th>
<th>Name</th>
<th>[% weight]</th>
<th>Classification according to 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-58-3</td>
<td>215-181-3</td>
<td>potassium-hydroxide</td>
<td>&lt; 5</td>
<td>Xn R22; C R35</td>
<td></td>
</tr>
</tbody>
</table>
Hazardous ingredients (continued)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>EC No</th>
<th>Name</th>
<th>[% weight]</th>
<th>Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]</th>
</tr>
</thead>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of inhalation
Remove the casualty into fresh air and keep him immobile.
If intensive inhalation of fumes seek medical treatment immediately.

In case of skin contact
In case of contact with skin wash off immediately with plenty of water.
Consult a doctor if skin irritation persists.

In case of eye contact
In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion
If swallowed seek medical advice immediately and show the doctor packing or label.
Rinse out mouth and give plenty of water to drink.

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment (Advice to doctor)
Treat symptoms.
After swallowing: Early endoscopy, to evaluate possibly occurred alternation of the mucous membrane in oesophagus and stomach. If necessary suction of remained substance.

SECTION 5: Firefighting measures

5.1. Extinguishing media
No information available.

5.2. Special hazards arising from the substance or mixture
No information available.

5.3. Advice for firefighters
Additional information
Product is incombustible

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective clothing.
Avoid contact with substance
6.2. Environmental precautions
Do not discharge into surface waters/groundwater.

6.3. Methods and material for containment and cleaning up
Dilute with water.
Flush away residues with water.
Take up mechanically and send for disposal.

6.4. Reference to other sections
No information available.

! SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
No special measures necessary if used correctly.

General protective measures
Avoid contact with eyes and skin

Hygiene measures
Clean skin thoroughly after working.
At work do not eat, drink, smoke or take drugs.
Remove soiled or soaked clothing immediately.

Advice on protection against fire and explosion
The product is not combustible.
No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in closed original container.

Advice on storage compatibility
Do not store together with food.

! Further information on storage conditions
Keep container tightly closed, open and handle carefully.

7.3. Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No information available.

8.2. Exposure controls
Respiratory protection
Not required with correct application

Hand protection
Gloves (alkali-resistant)
The material of the gloves has to be impermeable and consistent for the substance. Observe glove manufacturer’s instructions concerning penetrability and breakthrough time.

Eye protection
With demand: protective glasses
Skin protection
Not required with correct application

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Colour</th>
<th>Odour</th>
</tr>
</thead>
<tbody>
<tr>
<td>viscous</td>
<td>brownish</td>
<td>product-specific</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Important health, safety and environmental information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
</tr>
<tr>
<td>pH value in delivery state</td>
</tr>
<tr>
<td>pourpoint</td>
</tr>
</tbody>
</table>

**Flash point**
No flash point Measurement had been done until boiling temperature.

| Relative density | 1,055 g/cm3 | 20 °C | 1013 hPa |
| Solubility in water | multimiscible |
| Viscosity kinematic | ca. 35 mm2/s | 20 °C |

9.2. Other information
No information available.

10.1. Reactivity
No information available.

10.2. Chemical stability
No information available.

10.3. Possibility of hazardous reactions
Acid, concentrated
Oxidising agent, strong

10.4. Conditions to avoid
No hazardous reactions known.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
No hazardous decomposition products known.

**Additional information**
Product is stable under normal storage conditions.
! SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

<table>
<thead>
<tr>
<th>Value/Validation</th>
<th>Species</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 acute oral</td>
<td>6400 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
</tbody>
</table>

Irritability skin
- irritant experiences

Irritability eye
- strong irritant experiences

Skin sensitization
- non-sensitizing experiences

Toxicity test (Additional information)
- No experimental indication of genotoxicity in vitro (Ames-test negative).
- No experimental indication of genotoxicity in vivo (micronucleus test negative).
- There is no risk for a normal operation application.

Additional information
The product has to be handled with usual caution for chemicals.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

<table>
<thead>
<tr>
<th>Value</th>
<th>Species</th>
<th>Method</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>LC50 &gt; 5000 mg/l (96 h)</td>
<td>Oncorhynchus mykiss</td>
<td></td>
</tr>
<tr>
<td>Daphnia</td>
<td>EC50 &gt; 1500 mg/l (48 h)</td>
<td>Daphnia magna</td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50 &gt; 1000 mg/l (72 h)</td>
<td>Selenastrum capricornutum</td>
<td></td>
</tr>
<tr>
<td>Bacteria</td>
<td>EC50 &gt; 10000 mg/l (4 h)</td>
<td>Nitrifizierende Bakterien</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Biological degradability
- The used surfactants comply the terms of the biodegradability in the regulation (EG) Nr. 648/2004.

Biological eliminability
- The product is readily biodegradable to OECD criteria.

12.3. Bioaccumulative potential
- No information available.

12.4. Mobility in soil
- No information available.

12.5. Results of PBT and vPvB assessment
- No information available.

12.6. Other adverse effects
**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)**
revision 29.08.2013 (GB) Version 1.5

**Harzlöser**

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**Behaviour in sewage plant**
When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

**General regulation**
The breakdown properties of the product have not been tested. The information on these is given on the basis of details in the literature.
The behaviour of the product in sewage treatment plants has not been tested. The information on this is given on the basis of details in the literature.
The ecotoxic effect of the product has not been tested. The information on this is given on the basis of details in the literature.
This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

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**SECTION 13: Disposal considerations**

13.1. **Waste treatment methods**

Recommendations for the product
Incinerate in suitable incineration plant, but care official regulations.

Recommendations for packaging
Uncontaminated packaging may be taken for recycling.
Barrel: return by DSD (Dualistic System Germany)

Recommended cleansing agent
Water

General information
Waste removal corresponding to official directives

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**SECTION 14: Transport information**

Land and inland navigation transport ADR/RID
No dangerous goods as defined by these transport regulations.

Marine transport IMDG
No dangerous goods as defined by these transport regulations.

Air transport ICAO/IATA-DGR
No dangerous goods as defined by these transport regulations.

Transport/further information
No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.

Special precautions for user
No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available.

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**SECTION 15: Regulatory information**

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

National regulations
Water hazard class 1 self-classification

No information available.
15.2. Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Recommended uses and restrictions
National and local regulations concerning chemicals shall be observed. The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations. Keep out of the reach of children.

Further information
The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 22 Harmful if swallowed.
R 35 Causes severe burns.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.