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

Identification of the substance or preparation

Trade name

Cleaner D
Order No. 7025-6035-0231

Use of the substance/preparation
Solution for flame photometers

Company/undertaking identification

Address
EKF diagnostic GmbH
Ebendorfer Chaussee 3
D-39179 Barleben

Telephone no. +49 (0)3 92 03 / 7 85 - 0
Fax no. +49 (0)3 92 03 / 7 85 - 16

Information provided by / telephone
EKF diagnostic GmbH
Telephone: +49 (0)39203 / 785 - 0 (7 am - 4 pm on workdays)

Emergency telephone
+49 (0) 551 / 19240 Poison Information Centre North(Giftinformationszentrale Nord)

Advice on Safety Data Sheet
support@ekf-diagnostic.de

2.) Hazards identification

Classification
Xi; R36/38 Irritating to eyes and skin.

Hazard symbols
Xi Irritant

R phrases
36/38 Irritating to eyes and skin.

3.) Composition / information on ingredients

Chemical characterization
Mixture (preparation)

Hazardous ingredients
SODIUM HYDROXIDE

<table>
<thead>
<tr>
<th>EC no.</th>
<th>Index no.</th>
<th>CAS no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>215-185-5</td>
<td>011-002-00-6</td>
<td>1310-73-2</td>
</tr>
</tbody>
</table>

Concentration > 1 < 5 %-b.w.

Classification C; R35

Hazard symbols C R phrases 35

4.) First aid measures

General information
In case of persisting adverse effects, consult a physician. If the patient is likely to become unconscious, place and transport in stable sideways position. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.
After inhalation
Ensure supply of fresh air.

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

After eye contact
Separate eyelids, wash the eyes thoroughly with water (15 min.). Eye treatment by an oculist.

After ingestion
Rinse mouth thoroughly with water. Drink plenty of water. Do not induce vomiting.

5.) Fire-fighting measures

Suitable extinguishing media
Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide and smoke.

Special protective equipment for fire-fighters
Use self-contained breathing apparatus. Wear protective clothing.

Other information
Fire residues and contaminated firefighting water must be disposed off in accordance with the local regulations.

6.) Accidental release measures

Personal precautions
Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing.

Environmental precautions
Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up
Pick up with absorbent material (e.g., sand, kieselguhr, acid binder, universal binder, sawdust). Send in suitable containers for recovery or disposal.

7.) Handling and storage

Handling
Advice on safe handling
Avoid contact with skin and eyes. Keep container tightly closed.

Storage
Requirements for storage rooms and vessels
Keep the product in the original packing.

Advice on storage assembly
Do not store together with:
Acids
Metals
Oxidizing agents

Further information on storage conditions
Keep container tightly closed and dry.
8.) **Exposure controls / personal protection**

**Exposure limit values**

**SODIUM HYDROXIDE**

- CAS no. 1310-73-2
- EC no. 215-185-5

**List of approved workplace exposure limits (WELs) / EH40**

- Sodium hydroxide
- STEL 2 mg/m³

**Personal protective equipment**

**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn.

**Hand protection**

Nitril protective gloves (rotiprotect Nitril, AQL 1.5; Carl Roth GmbH & Co.)

**Eye protection**

Tightly fitting safety glasses (EN 166).

**Skin protection**

Clothing as usual in the chemical industry.

**General protective and hygiene measures**

Do not eat, drink or smoke during work time. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. After worktime and during work intervals the affected skin areas must be thoroughly cleaned. Use barrier skin cream.

9.) **Physical and chemical properties**

**General information**

- Form: liquid
- Colour: colourless, clear
- Odour: odourless

**Important health, safety and environmental information**

**Changes in physical state**

<table>
<thead>
<tr>
<th>Type</th>
<th>Boiling point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>&gt; 100 °C</td>
</tr>
</tbody>
</table>

**Vapour pressure**

| Value | < 23.4 hPa |

**Density**

| Value | 1.07 g/cm³ |
| Reference temperature | 20 °C |

**Solubility in water**

- Remarks: soluble

**pH value**

| Value | appr. 11.6 |
| Reference temperature | 20 °C |
| Concentration | 20 g/l |

10.) **Stability and reactivity**

**Conditions to avoid**

Heat
**Materials to avoid**
Metals; Oxidizing agents; Acids; Reactions with light metals, with evolution of hydrogen.

**Hazardous decomposition products**
None, if handled according to order

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### 11.) Toxicological information

**Experience in practice**
- Influence of the product with the eyes can lead to blindness.
- Irritating effects on the skin and mucous membrane.
- Has a degreasing effect on the skin.

**Other information (chapter 11.)**
Product specific toxicological data are not known.

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### 12.) Ecological information

**Other adverse effects**
- Do not allow to enter soil, waterways or waste water canal.
- There are no data available on the preparation itself.

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### 13.) Disposal considerations

**Product**
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

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### 14.) Transport information

#### Land transport ADR/RID
- **Class**: 8
- **Packing group**: II
- **Hazard identification no.**: 80
- **Label**: 8
- **UN number**: 1824
- **Technical name**: Sodium hydroxide solution

#### Marine transport IMDG
- **Class**: 8
- **Packing group**: II
- **UN number**: 1824
- **Proper shipping name**: Sodium hydroxide, solution
- **EmS**: F-A, S-B
- **MARPOL**: --
- **Label**: 8
15.) **Regulatory information**

**Labeling in accordance with EC directives**
The product is classified and labelled in accordance with EC Directive 1999/45/EC.

**Hazard symbols**
- Xi Irritant

**Hazardous component(s) to be indicated on label, contains:**
- SODIUM HYDROXIDE

**R phrases**
- 36/38 Irritating to eyes and skin.

**S phrases**
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances**
- Remarks: Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

16.) **Other information**

**Sources of key data used to compile the data sheet:**
- National Threshold Limit Values of the corresponding countries as amended in each case.
- Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
- The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

**Relevant R-phrases (chapter 3):**
- 35 Causes severe burns.

**Department issuing safety data sheet**
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- Georg-Wilhelm-Str. 183 b, D-21107 Hamburg
- Tel.: +49 40 / 41 92 13 00  Fax: +49 40 / 41 92 13 57  e-mail: umco@umco.de

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.