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

1.1. Product identifier

Product code  51340056, 51340231, 51340232

Synonyms  None.

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

Use of the Substance/Preparation  Laboratory chemicals

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Mettler-Toledo AG
Process Analytics
Im Hackacker 15
CH-8902 Urdorf
Schweiz
Tel:  +41-44-729 62 11
Fax:  +41-44-729 66 36
Email: process.hotline@mt.com

1.4. Emergency telephone number  +1-800-535 50 53 (Info Trac, 24 hrs)

Revision Date  27.05.2013

Version  6
2. Hazards identification

Causes mild skin irritations

2.1. Classification of the substance or mixture

NFPA Ratings (Scale 0-4):
- HEALTH=1
- FLAMMABILITY=0
- REACTIVITY=0
- SPECIAL=0

HMIS Ratings (Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe):
- HEALTH=1
- FLAMMABILITY=0
- REACTIVITY=0
- PROT. EQUIPMENT=A (Safety Glasses)

Classification according to GHS  
Skin corrosion/irritation, Cat. 3, H316

In accordance with Regulation (EC) No. 1272/2008 (GHS/CLP), the product does not need to be classified nor labelled.

Additional information  
For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements

Signal Word  
Warning

Hazard Statements  
H316: Causes mild skin irritation.

Precautionary statements  
P332+P313: If skin irritation occurs: Get medical advice/attention.

Additional advice  
None.

GHS product identifier  
Sodium hydroxide; caustic soda, CAS-No. 1310-73-2

2.3. Other hazards

May cause eye/skin irritation.

3. Composition/information on ingredients

Chemical characterization  
Buffer solution.

<table>
<thead>
<tr>
<th>Components</th>
<th>CLP Classification</th>
<th>CAS</th>
<th>REACH No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionised water</td>
<td>95% - 99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium hydroxide; caustic soda</td>
<td>0.1% - 0.5%</td>
<td>Skin Corr. 1A H314 [Skin Corr. 1A H314: C ≥ 5 %]</td>
<td>1310-73-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Corr. 1B H314: 2 % ≤ C &lt; 5 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Irrit. 2 H315: 0.5 % ≤ C &lt; 2 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2 H319: 0.5 % ≤ C &lt; 2 %</td>
<td></td>
</tr>
</tbody>
</table>

Buffer solution pH 10.00
4. First aid measures

4.1. Description of first aid measures

**Inhalation**
Move to fresh air in case of accidental inhalation of vapours or decomposition products. Consult a physician for severe cases.

**Skin contact**
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

**Ingestion**
Rinse mouth. Consult a physician for severe cases.

4.2. Most important symptoms and effects, both acute and delayed

If you feel unwell, seek medical advice (show the label where possible).

4.3. Indication of any immediate medical attention and special treatment needed

None known.

5. Firefighting measures

5.1. Extinguishing media

**Suitable extinguishing media**
Use dry chemical, CO2, water spray or alcohol foam.

**Extinguishing media which must not be used for safety reasons**
None.

5.2. Special hazards arising from the substance or mixture

The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

5.3. Advice for firefighters

**Special protective equipment for firefighters**
Standard procedure for chemical fires. In the event of fire, wear self contained breathing apparatus. Wear protective suit.

**Specific methods**
Water mist may be used to cool closed containers.
6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>Advice for non-emergency personnel</th>
<th>Ensure adequate ventilation. Use personal protective equipment. Sweep up to prevent slipping hazard. Avoid contact with skin and eyes. Do not breathe vapours/dust.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice for emergency responders</td>
<td>Handle in accordance with good industrial hygiene and safety practice.</td>
</tr>
</tbody>
</table>

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable and closed containers for disposal.

6.4. Reference to other sections

See chapter 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Store at room temperature in the original container.

7.3. Specific end use(s)

No information available.

8. Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Exposure limit(s)</th>
<th>No data is available on the product itself.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide (CAS 1310-73-2)</td>
<td></td>
</tr>
<tr>
<td>U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)</td>
<td>2 mg/m3 TWA</td>
</tr>
<tr>
<td>U.S. - OSHA - Vacated PELs - Ceilings</td>
<td>2 mg/m3 Ceiling</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

<table>
<thead>
<tr>
<th>Occupational exposure controls</th>
<th>Avoid contact with skin, eyes and clothing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal protection equipment</td>
<td></td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>In case of good ventilation no personal respiratory protective equipment required.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>The selected protective gloves have to satisfy the specifications of</td>
</tr>
</tbody>
</table>

Buffer solution pH 10.00
Eye protection
Safety glasses with side-shields conforming to EN 166.

Skin and body protection
Long sleeved clothing.

Thermal hazards
No special measures required.

Environmental exposure controls
No special measures required.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>10</td>
</tr>
<tr>
<td>Melting point/range:</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point/range:</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability:</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosion limits:</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>No information available</td>
</tr>
<tr>
<td>Relative density:</td>
<td>No information available</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>completely miscible</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature:</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No information available</td>
</tr>
<tr>
<td>Combustion/explosion hazards:</td>
<td>not hazardous</td>
</tr>
<tr>
<td>Oxidizing properties:</td>
<td>None</td>
</tr>
</tbody>
</table>

9.2. Other information

10. Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Stable at normal conditions.

10.3. Possibility of hazardous reactions
No information available.
10.4. Conditions to avoid  
Not required.

10.5. Incompatible materials  
None.

10.6. Hazardous decomposition products  
None reasonably foreseeable.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity  
No data is available on the product itself.  
**Sodium hydroxide (CAS 1310-73-2)**  
Dermal LD50 Rabbit 1350 mg/kg

Skin corrosion/irritation  
Mild skin irritation.

Serious eye damage/eye irritation  
Slight eye irritation.

Respiratory / Skin Sensitisation  
None.

Carcinogenicity  
No data available.

Germ cell mutagenicity  
No data available.

Reproductive toxicity  
No data available.

Specific target organ toxicity (single exposure)  
No data available.

Specific target organ toxicity (repeated exposure)  
No data available.

Aspiration hazard  
No data available.

Human experience  
No data available.

Information on likely routes of exposure  
dermal

Other information  
The product contains no substances which at their given concentration, are considered to be hazardous to health.

12. Ecological information

12.1. Toxicity  
No data is available on the product itself.

**Sodium hydroxide (CAS 1310-73-2)**  
Ecotoxicity - Freshwater Fish -  
Acute Toxicity Data  
96 h LC50 Oncorhynchus mykiss: 45.4 mg/L [static]

12.2. Persistence and  
Expected to be biodegradable.
12.3. Bioaccumulative potential  Bioaccumulation is unlikely.
12.4. Mobility in soil  No data available.
12.5. Results of PBT and vPvB assessment  No information available.
12.6. Other adverse effects  No information available.

13. Disposal considerations

13.1. Waste treatment methods
Waste from residues / unused products  Dispose of in accordance with local regulations.
Contaminated packaging  Dispose of as unused product.

14. Transport information

ADR/RID  Not required.
IMO  Not required.
ICAO  Not required.
Further Information  Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

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

Regulatory Information  NFPA Ratings (Scale 0-4):
HEALTH=1
FLAMMABILITY=0
REACTIVITY=0
SPECIAL=0
HMIS Ratings (Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe):
HEALTH=1
FLAMMABILITY=0
REACTIVITY=0
PROT. EQUIPMENT=A (Safety Glasses)
In accordance with Regulation (EC) No. 1272/2008 (GHS/CLP), the product does not need to be classified nor labelled.
### 15.2. Chemical safety assessment

Not required.

### 16. Other information

| Key or legend to abbreviations and acronyms | None. |
| Key literature references and sources for data | Information taken from reference works and the literature. |
| Classification procedure | Calculation method. |
| Full text of phrases referred to under sections 2 and 3 | H314: Causes severe skin burns and eye damage.  
H316: Causes mild skin irritation. |

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.