SAFETY DATA SHEET
according to Regulation (EU) No. 453/2010

Buffer Solution pH 4.01

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

1.1. Product identifier

Product code
51340228, 51319012, 51319054, 51340057, 51340058

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 Identification
Mettler-Toledo AG
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

None.

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)

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

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

None.

Additional information

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

2.2. Label elements

none

2.3. Other hazards

No hazards to be especially mentioned.

3. Composition/information on ingredients

Chemical characterization

Buffer solution.

<table>
<thead>
<tr>
<th>Components</th>
<th>GHS 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>
</tbody>
</table>

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

Hazardous impurities

None known.
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

Advice for non-emergency personnel
Ensure adequate ventilation. Use personal protective equipment. Sweep up to prevent slipping hazard. Avoid contact with skin and eyes. Do not breathe vapours/dust.

Advice for emergency responders
Handle in accordance with good industrial hygiene and safety practice.

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
Exposure limit(s)
No data is available on the product itself.

8.2. Exposure controls
Occupational exposure controls
Avoid contact with skin, eyes and clothing.

Personal protection equipment
Respiratory protection
In case of good ventilation no personal respiratory protective equipment required.

Hand protection
The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it. Solvent-resistant gloves (butylrubber).

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: Prevent product from entering surface water or sewage.

### 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>Red</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>4</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

<table>
<thead>
<tr>
<th>Category</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>No data is available on the product itself.</td>
</tr>
<tr>
<td>Skin corrosion/irritiation</td>
<td>No skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>No eye irritation.</td>
</tr>
<tr>
<td>Respiratory / Skin Sensitisation</td>
<td>None.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No data available.</td>
</tr>
<tr>
<td>Human experience</td>
<td>No data available.</td>
</tr>
<tr>
<td>Information on likely routes of exposure</td>
<td>dermal</td>
</tr>
<tr>
<td>Other information</td>
<td>The product contains no substances which at their given concentration, are considered to be hazardous to health.</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity

No data is available on the product itself.

12.2. Persistence and degradability

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

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
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

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15.2. Chemical safety assessment
Not required.
16. Other information

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms</th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key literature references and sources for data</td>
<td>Information taken from reference works and the literature.</td>
</tr>
<tr>
<td>Classification procedure</td>
<td>Calculation method.</td>
</tr>
<tr>
<td>Full text of phrases referred to under sections 2 and 3</td>
<td>None.</td>
</tr>
<tr>
<td>Disclaimer</td>
<td>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.</td>
</tr>
</tbody>
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