

according to Regulation (EC) No. 1907/2006 Version 5.0 Revision Date 09.05.2012

# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

## 1.1 Product identifiers

|     | Product name                                                                  | : | Sodium hydroxide 1M solution                    |  |
|-----|-------------------------------------------------------------------------------|---|-------------------------------------------------|--|
|     | Product Number<br>Brand                                                       | : | 52-7554<br>Rapid                                |  |
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against |   |                                                 |  |
|     | Identified uses                                                               | : | Laboratory chemicals, Manufacture of substances |  |
| 1.3 | Details of the supplier of the safety data sheet                              |   |                                                 |  |
|     | Company                                                                       |   | Denid Fleetrenies                               |  |

| Company   | : Rapid Electronics,    |
|-----------|-------------------------|
|           | Severalls Lane,         |
|           | Colchester,             |
|           | Essex,                  |
|           | CO4 5JS, United Kingdom |
| Telephone | : +44 (0) 1206 751166   |

| • | +44 (0) 1206 751166   |
|---|-----------------------|
| : | +44 (0) 1206 751188   |
| : | sales@rapidelec.co.uk |
|   | :                     |

## 1.4 Emergency telephone number

Emergency Phone # : +44 (0) 1206 751166

# 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Skin corrosion (Category 1A)

# Classification according to EU Directives 67/548/EEC or 1999/45/EC Causes severe burns.

 $\wedge$ 

# 2.2 Label elements

# Labelling according Regulation (EC) No 1272/2008 [CLP]

| Pictogram<br>Signal word           | Danger                                                                                                                                             |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard statement(s)<br>H314        | Causes severe skin burns and eye damage.                                                                                                           |
| Precautionary statement(s)<br>P280 | Wear protective gloves/ protective clothing/ eye protection/ face                                                                                  |
| P305 + P351 + P338                 | protection.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove<br>contact lenses, if present and easy to do. Continue rinsing. |
| P310                               | Immediately call a POISON CENTER or doctor/ physician.                                                                                             |
| Supplemental Hazard<br>Statements  | none                                                                                                                                               |

## According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

| ≌≝ R-phrase(s)<br>R35 | Causes severe burns.                                                       |
|-----------------------|----------------------------------------------------------------------------|
| S-phrase(s)           |                                                                            |
| S26                   | In case of contact with eyes, rinse immediately with plenty of water and   |
|                       | seek medical advice.                                                       |
| S37/39                | Wear suitable gloves and eye/face protection.                              |
| S45                   | In case of accident or if you feel unwell, seek medical advice immediately |
|                       | (show the label where possible).                                           |

## 2.3 Other hazards - none

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.2 Mixtures

| Formula          | : | HNaO        |
|------------------|---|-------------|
| Molecular Weight | : | 40.00 g/mol |

| Component                                                     |  | Classification                | Concentration |
|---------------------------------------------------------------|--|-------------------------------|---------------|
| Sodium hydroxide                                              |  |                               |               |
| CAS-No. 1310-73-2   EC-No. 215-185-5   Index-No. 011-002-00-6 |  | Skin Corr. 1A; H314<br>C, R35 | 5 - 10 %      |

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

# 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

## **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Inhalation of vapors may cause:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

# **4.3** Indication of any immediate medical attention and special treatment needed no data available

# 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Sodium oxides Sodium oxides
- **5.3** Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.
- 5.4 Further information no data available

# 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- 6.2 Environmental precautions Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections For disposal see section 13.

# 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

- 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3 Specific end uses

no data available

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

## Components with workplace control parameters

| Component        | CAS-No.   | Value | Control parameters | Basis                                       |
|------------------|-----------|-------|--------------------|---------------------------------------------|
| Sodium hydroxide | 1310-73-2 | STEL  | 2 mg/m3            | UK. EH40 WEL - Workplace<br>Exposure Limits |

#### 8.2 Exposure controls

## Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

| a)                                         | Appearance                                         | Form: liquid      |  |  |
|--------------------------------------------|----------------------------------------------------|-------------------|--|--|
| b)                                         | Odour                                              | no data available |  |  |
| C)                                         | Odour Threshold                                    | no data available |  |  |
| d)                                         | рН                                                 | no data available |  |  |
| e)                                         | Melting point/freezing<br>point                    | no data available |  |  |
| f)                                         | Initial boiling point and boiling range            | no data available |  |  |
| g)                                         | Flash point                                        | no data available |  |  |
| h)                                         | Evaporation rate                                   | no data available |  |  |
| i)                                         | Flammability (solid, gas)                          | no data available |  |  |
| j)                                         | Upper/lower<br>flammability or<br>explosive limits | no data available |  |  |
| k)                                         | Vapour pressure                                    | no data available |  |  |
| I)                                         | Vapour density                                     | no data available |  |  |
| m)                                         | Relative density                                   | no data available |  |  |
| n)                                         | Water solubility                                   | no data available |  |  |
| o)                                         | Partition coefficient: n-<br>octanol/water         | no data available |  |  |
| p)                                         | Autoignition<br>temperature                        | no data available |  |  |
| q)                                         | Decomposition<br>temperature                       | no data available |  |  |
| r)                                         | Viscosity                                          | no data available |  |  |
| s)                                         | Explosive properties                               | no data available |  |  |
| t)                                         | Oxidizing properties                               | no data available |  |  |
| Other safety information no data available |                                                    |                   |  |  |

# 10. STABILITY AND REACTIVITY

## 10.1 Reactivity no data available

9.2

**10.2 Chemical stability** no data available

- **10.3** Possibility of hazardous reactions no data available
- **10.4 Conditions to avoid** no data available
- **10.5** Incompatible materials acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc
- **10.6 Hazardous decomposition products** Other decomposition products - no data available

# 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity

no data available

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## **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

#### Potential health effects

Inhalation

| Inhalation | May be harmful if inhaled. Material is extremely destructive to the tissue of |
|------------|-------------------------------------------------------------------------------|
|            | the mucous membranes and upper respiratory tract.                             |
| Ingestion  | May be harmful if swallowed. Causes burns.                                    |
| Skin       | May be harmful if absorbed through skin. Causes skin burns.                   |
| Eyes       | Causes eye burns.                                                             |
|            |                                                                               |

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## Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Inhalation of vapors may cause:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

**Additional Information** 

RTECS: Not available

# 12. ECOLOGICAL INFORMATION

- 12.1 Toxicity
  - no data available

| 12.2 | Persistence and degradability<br>no data available                                                                   |                          |                                    |            |  |  |
|------|----------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------|------------|--|--|
| 12.3 | Bioaccumulative potential no data available                                                                          |                          |                                    |            |  |  |
| 12.4 | Mobility in soil<br>no data available                                                                                |                          |                                    |            |  |  |
| 12.5 | <b>Results of PBT an</b> no data available                                                                           | d vPvB asses             | sment                              |            |  |  |
| 12.6 | Other adverse effe<br>no data available                                                                              | ects                     |                                    |            |  |  |
| 13.  | DISPOSAL CONSI                                                                                                       | DERATIONS                |                                    |            |  |  |
| 13.1 | Waste treatment n                                                                                                    | nethods                  |                                    |            |  |  |
|      | Product<br>Offer surplus and n                                                                                       | on-recyclable s          | solutions to a licensed disposal o | company.   |  |  |
|      | <b>Contaminated pac</b><br>Dispose of as unus                                                                        |                          |                                    |            |  |  |
| 14.  | TRANSPORTINFO                                                                                                        | ORMATION                 |                                    |            |  |  |
| 14.1 | <b>UN number</b><br>ADR/RID: 1824                                                                                    |                          | IMDG: 1824                         | IATA: 1824 |  |  |
| 14.2 | UN proper shipping nameADR/RID:SODIUM HYDROXIDE SOLUTIONIMDG:SODIUM HYDROXIDE SOLUTIONIATA:Sodium hydroxide solution |                          |                                    |            |  |  |
| 14.3 | Transport hazard ADR/RID: 8                                                                                          | class(es)                | IMDG: 8                            | IATA: 8    |  |  |
| 14.4 | Packaging group<br>ADR/RID: III                                                                                      |                          | IMDG: III                          | IATA: III  |  |  |
| 14.5 | Environmental has ADR/RID: no                                                                                        | zards                    | IMDG Marine pollutant: no          | IATA: no   |  |  |
| 14.6 | Special precautions for user<br>no data available                                                                    |                          |                                    |            |  |  |
| 15.  | REGULATORYIN                                                                                                         | FORMATION                |                                    |            |  |  |
|      | This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.                               |                          |                                    |            |  |  |
| 15.1 | Safety, health and environmental regulations/legislation specific for the substance or mixture no data available     |                          |                                    |            |  |  |
| 15.2 | Chemical Safety Assessment<br>no data available                                                                      |                          |                                    |            |  |  |
| 16.  | OTHER INFORMA                                                                                                        | TION                     |                                    |            |  |  |
|      | Text of H-code(s)                                                                                                    | and R-phrase             | (s) mentioned in Section 3         |            |  |  |
|      | H314<br>Skin Corr.                                                                                                   | Skin corrosio            | re skin burns and eye damage.<br>n |            |  |  |
|      | C<br>R35                                                                                                             | Corrosive<br>Causes seve | re burns.                          |            |  |  |
|      | Further information                                                                                                  |                          |                                    |            |  |  |
|      |                                                                                                                      |                          |                                    |            |  |  |

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.