

**1. Identification**

Product Code **CS4450-24**

Product Name **SODIUM HYDROXIDE 0.1M (0.1N) STANDARD SOLUTION**

Other Names ion.

CAS Number 1310-73-2

Supplier:  **BEECROFT & PARTNERS**  
Northfield Road  
Rotherham  
South Yorkshire

Phone 01709-377881  
Fax 01709-369264

Emergency Telephone 08:30-1700 01709-377881  
24hr 112  
(Have this document to hand)

**2. Composition**

| Component        | CAS No    | EEC No    | Conc w/w | Classification & Risk Phrases | Exp (See 8.1) |
|------------------|-----------|-----------|----------|-------------------------------|---------------|
| Sodium hydroxide | 1310-73-2 | 215-185-5 | 0.4%     | R35                           | OES           |

**3. Hazards Identification**

Not considered harmful

**4. First Aid Measures**

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE

Inhalation Remove from exposure.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.

**5. Fire Fighting Measures**

Hazards Presents no specific fire danger.

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

**6. Accidental Release Measures**

Personal Protection Use approved personal protective equipment.

## 6. Accidental Release Measures (continued)

|                |                                                                                                                                                                                      |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enviromental   | Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs. |
| Major Spillage | Contain spill with inert material. Neutralise with 5M hydrochloric acid. Wash area down with copious amounts of water.                                                               |
| Minor Spillage | Wash area down with copious amounts of water.                                                                                                                                        |

## 7. Storage & Handling

|                      |                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling Precautions | Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.<br><br>Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits. |
| Storage Conditions   | Store in a dry place protected against moisture and water. Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials.                                            |

## 8.1 Occupational Exposure Limits

| Component        | CAS No    | Occupational Exposure Standard |        |            |        | Maximum Exposure Limits |        |            |        |
|------------------|-----------|--------------------------------|--------|------------|--------|-------------------------|--------|------------|--------|
|                  |           | Long Term                      |        | Short Term |        | Long Term               |        | Short Term |        |
|                  |           | ppm                            | mg m-3 | ppm        | mg m-3 | ppm                     | mg m-3 | ppm        | mg m-3 |
| Sodium hydroxide | 1310-73-2 | -                              | -      | -          | 2      | -                       | -      | -          | -      |

## 8.2 Personal Protection

|             |                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respiratory | In cases where a spray or mist may be formed, use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus. |
| Hands       | Use nitrile gloves or PVC gauntlets.                                                                                                                                                                                                             |
| Eyes        | Use chemical splash proof glasses or goggles.                                                                                                                                                                                                    |
| Skin        | If skin contact or contamination of clothing is likely, protective clothing must be worn.                                                                                                                                                        |

## 9. Physical & Chemical Properties

|                       |                              |
|-----------------------|------------------------------|
| Appearance            | Clear colourless liquid.     |
| Odour                 | Odourless.                   |
| pH                    | 14 @ 20 °C                   |
| Boiling point         | Aqueous solution             |
| Melting point         | Aqueous solution             |
| Flash point           | Not available                |
| Upper Flammable Limit | Not available                |
| Lower Flammable Limit | Not available                |
| Auto Ignition         | Not available                |
| Explosive properties  | No.                          |
| Oxidising Properties  | No.                          |
| Vapour Presure        | 1 mm @ 739,C                 |
| Relative Density      | 1.0032                       |
| Water Solubility      | Completely soluble in water. |

## 10. Stability & Reactivity

|                                  |                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------|
| Chemical Stability               | Stable under normal conditions                                                     |
| Conditions to Avoid              | No specific conditions.                                                            |
| Materials to Avoid               | Acids. Reacts with aluminium and zinc to produce extremely flammable hydrogen gas. |
| Hazardous Decomposition Products | None unusual.                                                                      |

## 11. Toxicological Information

|                      |                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------|
| Eyes                 | The liquid may be irritating to the eyes but unlikely to cause serious injury.             |
| Skin                 | The liquid may be irritating to the skin.                                                  |
| LD50 Skin            | Not available                                                                              |
| Ingest               | Ingestion of large amounts may cause nausea, abdominal discomfort, vomiting and diarrhoea. |
| LD50 Ingest          | Not available                                                                              |
| Inhalation           | Presents no significant health hazard by inhalation.                                       |
| Carcinogenicity      | Not considered to be a carcinogen.                                                         |
| Mutagenicity         | Not considered to be a mutagen.                                                            |
| Reproductive Effects | None identified.                                                                           |

## 12. Ecological

Small amounts present no specific environmental hazard. Neutralised material presents no specific environmental hazard.

## 13. Disposal Considerations

|                        |                                                                                                                           |
|------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Disposal Methods       | Dilute in a large excess of water and carefully neutralise with an acid, then wash to drain with copious amounts of water |
| Contaminated Packaging | Wash out containers with water. Use a licensed waste disposer.                                                            |

## 14. Transport Information

|                      |                |
|----------------------|----------------|
| Proper Shipping Name | Non-restricted |
| UN Number            | Non-restricted |
| UN Classification    | None           |
| Subsidiary Risk      | None           |
| Flash Point          | Not available  |
| Packing Group        | None           |
| Marine pollutant     | No             |
| ADR Hazard ID        | Non-restricted |

## 15. Regulatory Information

|                       |                          |
|-----------------------|--------------------------|
| Labelling             | None                     |
| Classification        |                          |
| Label Symbols         | None                     |
| Risk & safety Phrases | Avoid contact with eyes. |
| EEC Number            | 215-185-5                |

## 16. Other Information

|                      |                                                                                                                                                                                                                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Document Information | This document has been prepared in accordance with directive 88/379/EEC.<br><br>The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.<br><br>Revision Date: 29/08/97.<br>Data reviewed and PDF file generated: 07/06/04.<br>Copyright 2004 Beecroft & Partners. |
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