charles river | endotoxin and microbial detection

# SAFETY DATA SHEET

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|---|---|---|
| **Version** | 2.0 | **Issue Date 18 Jul 2011** |
| **Revision Date** | 29 Jun 2011 | |
| **Supersedes** | 15 Jan 2002 | **According to Regulation (EC) No. 1907/2006** |

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

**Product Name** HYDROCHLORIC ACID SOLUTION, 1.0 N
**Brand** Endosafe
**Product Codes** A400

**Intended Use** Laboratory chemicals

**Manufacturer** Charles River
**Division** Endotoxin and Microbial Detection
**Address** 1023 Wappoo Rd
Suite 43-B
Charleston, SC 29407

**Telephone** 001-843-402-4900
**Emergency** 001-843-402-4900

## SECTION 2: HAZARDS IDENTIFICATION

**Classification** Not a dangerous substance or mixture according to Regulation (EC) No. 1272/2008.

**Label elements** This product does not require labeling.

**Hazard statements** None

**Other hazards** None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name** Hydrochloric acid solution, 1.0 N

**Synonyms** Muriatic acid, Aqueous hydrogen chloride

| Components | CAS# | RTECS# | EC# | Concentration |
|---|---|---|---|---|
| Water | 7732-18-5 | ZC0110000 | 231-791-2 | 96.35 % |
| Hydrochloric acid | 7647-01-0 | MW4025000 | 231-595-7 | 3.65 % |

## SECTION 4: FIRST AID MEASURES

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|---|---|
| **Eye contact** | Flush eyes with plenty of water. |
| **Skin contact** | Take off contaminated clothing and shoes immediately, wash off with soap and plenty of water. Consult a physician. |
| **Ingestion** | Never give anything by mouth to an unconscious person. Rinse mouth with water. |
| **Inhalation** | Move person into fresh air. If not breathing give artificial respiration consult a physician |

## SECTION 5: FIRE-FIGHTING MEASURES

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|---|---|
| **Flash point** | Not available |
| **Ignition temperature** | Not available |
| **Extinguishing media** | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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| **Personal precautions** | Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. |
| **Environmental precautions** | Prevent product from entering drains. |
| **Methods for cleaning** | Neutralize with soda ash or dilute caustic soda. Collect with appropriate absorbent and place in a suitable container for disposal. |

## SECTION 7: HANDLING AND STORAGE

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| **Handling** | Wear personal protective equipment and avoid contact with skin and eyes. Good laboratory technique should be used in handling product. |
| **Storage** | Keep container tightly closed in a dry and well ventilated place. |

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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|---|---|
| **Engineering measures** | Use closed systems when possible. Provide local exhaust ventilation where vapor or mist may be generated. Ensure compliance with applicable exposure limits. |

**Exposure limits for Hydrochloric acid (CAS# 7647-01-0)**

| TWA | STEL | Update | Comment |
|---|---|---|---|
| 5 ppm<br>8 mg/m$^3$ | 10 ppm<br>15 mg/m$^3$ | 16 Jun 2000 | Directive 2000/39/EC |
| 1 ppm<br>2 mg/m$^3$ | 5 ppm<br>8 mg/m$^3$ | 06 Apr 2005 | UK EH40 WEL<br>Workplace Exposure Limits |

**Respiratory protection** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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).

**Eye protection** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection** Wear appropriate protective gloves and clothes to prevent skin exposure.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practices.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| **Physical state** | Clear liquid |
| **Odor** | Pungent odor |
| **pH** | <1 |
| **Melting/freezing point** | 0 ºC |
| **Boiling point** | 100 ºC |
| **Flash point** | Not available |
| **Evaporation rate** | Not available |
| **Flammability** | Not available |
| **Upper/lower flammability limits** | Not available |
| **Vapor pressure** | Not available |
| **Vapor density** | Not available |
| **Specific gravity** | 1.0 – 1.2 g/cm$^3$ @ 25 ºC |
| **Water solubility** | Soluble |
| **Partition coefficient: n-octanol/water** | Not available |
| **Decomposition temperature** | Not available |
| **Viscosity** | Not available |

## SECTION 10: STABILITY AND REACTIVITY

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|---|---|
| **Stability** | Stable under normal temperatures and pressures. |
| **Materials to avoid** | Bases, Amines, Alkali metals, Metals, hexalithium disilicide, permanganates, e.g. potassium permanganate, Fluorine |
| **Conditions to avoid** | Not available |
| **Hazardous polymerization** | None under normal processing conditions |
| **Hazardous decomposition** | Hazardous decomposition products formed under fire conditions – Hydrogen chloride gas |

## SECTION 11: TOXICOLOGICAL INFORMATION

**Acute toxicity**

| | |
|---|---|
| LD50 Oral | 700 mg/kg [Rat] |
| LD50 Dermal | 5010 mg/kg [Rabbit] |

| | |
|---|---|
| **Skin corrosive/Irritant** | Not available |
| **Serious eye damage/irritation** | Not available |
| **Respiratory sensitization** | Not available |
| **Germ cell mutagenicity** | Not available |

**Carcinogenicity**

| | |
|---|---|
| **IARC** | No components 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** | Not available |
| **Specific target organ systemic toxicity (single exposure)** | Not available |
| **Specific target organ systemic toxicity (repeated exposure)** | Not available |
| **Aspiration hazard** | Not available |

## SECTION 12: ECOLOGICAL INFORMATION

**Aquatic and terrestrial toxicity**

| | |
|---|---|
| LC50 Gambusia affinis | 282 mg/L (96 hrs) |

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|---|---|
| **Persistence/degradability** | Not available |
| **Bioaccumulative potential** | Not available |

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|---|---|
| **Mobility in soil** | Not available |
| **PBT and vPvB assessment** | Not available |

## SECTION 13: DISPOSAL CONSIDERATIONS

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| **Product** | Contact a licensed waste disposal service to dispose of this product. Dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. |
| **Contaminated packaging** | Dispose of as unused product. |

## SECTION 14: TRANSPORT INFORMATION

**ADR/RID, IMDG, IATA**

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|---|---|
| UN# | 1789 |
| Proper shipping name | Hydrochloric acid solution |
| Hazard class | 8 |
| Packing group | III |
| Hazard label |  |
| Marine pollutant | No |

## SECTION 15: REGULATORY INFORMATION

**Safety, health, and environmental regulation/legislation specific for the substance or mixture**

No data available

## SECTION 16: OTHER INFORMATION

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Charles River Endosafe makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Charles River Endosafe be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature, are made hereunder with respect to information or the product to which the information refers.

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