

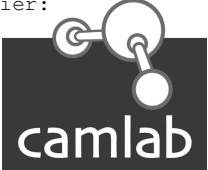
Camlab Limited – Material Safety Data Sheet

1. Identification

Product Code CC/1734-DA

Product Name HYDROCHLORIC ACID 2.0M (2N) A.R.

CAS Number 7647-01-0

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2. Composition

| Component | CAS No | EEC No | Conc w/w | Classification & Risk Phrases | Exp (See 8.1) |
|-------------------|-----------|-----------|----------|-------------------------------|---------------|
| Hydrochloric acid | 7647-01-0 | 231-595-7 | 7.3% | R34,R37 | WEL |

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.

Inhalation Remove from exposure.

Ingestion Wash out the patients mouth thoroughly with water.

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. Evacuate area immediately. Do not allow general use of area until it is safe to do so.

Environmental 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 and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

6. Accidental Release Measures (continued)

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.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

Storage Conditions Well ventilated, cool, dry storage .

8.1 Workplace Exposure Limits

| Component | CAS No | Workplace Exposure Limits | | | | 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 |
| Hydrochloric acid | 7647-01-0 | 1.000 | 2.000 | 5.000 | 8.000 | - | - | - | - |

8.2 Personal Protection

Respiratory 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 Wear gloves.

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 1 @ 20 °C

Boiling point Aqueous solution

Melting point 10.0- °CAqueous solution

Flash point Aqueous solution

Upper Flammable Limit Not available

Lower Flammable Limit Not available

Auto Ignition Not available

Explosive properties No.

Oxidising Properties No.

Vapour Pressure Not available

Relative Density 1.0337 °C

Water Solubility Completely miscible in water.

10. Stability & Reactivity

Chemical Stability Stable under normal conditions

Conditions to Avoid No specific conditions.

Materials to Avoid Alkalis. Potassium permanganate. Reacts with most metals to produce extremely flammable hydrogen gas.

Hazardous Decomposition Products Will decompose to emit toxic and irritant fumes of hydrogen chloride.

11. Toxicological Information

Eyes The liquid may be irritating to the eyes.

Skin Presents no significant hazard by skin contact.

LD50 Skin Not available

11. Toxicological Information (continued)

| | |
|----------------------|--|
| Ingest | Presents no significant hazard by ingestion. |
| 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

No specific environmental hazard.

13. Disposal Considerations

| | |
|------------------------|---|
| Disposal Methods | Neutralise with lime water or sodium hydroxide prior to disposal. Flush to drain. |
| 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 |
| Transport Category | None |
| Marine pollutant | No |
| ADR Hazard ID | Non-restricted |

15. Regulatory Information

| | |
|-----------------------------|--|
| Labelling Classification | None |
| Label Symbols | None |
| Risk & safety Phrases | Keep out of reach of children. After contact with skin, wash immediately with plenty of water. |
| EEC Number | 231-595-7 |

16. Other Information

| | |
|----------------------|---|
| Document Information | This document has been prepared in accordance with directive 88/379/EEC. The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. Revision Date: 12/01/98. Data reviewed and PDF file generated: 17/03/10. Copyright 2010 Camlab Limited. |
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