


Section 1. Identification

- 1.1 Product Identifier** CHE2156
- Product Name HYDROCHLORIC ACID 5.0M (5N) 1L.
- CAS Number 7647-01-0
- REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
- Molecular Formula $\text{HCl} = 36.46$
- 1.2 Relevant identified uses of the substance or mixture & uses advised against**
- Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.
- 1.3 Supplier** Scientific Laboratory Supplies
-  Unit 6, Foresters Avenue
Fairham Business Park
Fairham
Nottingham
NG11 2AF
UNITED KINGDOM
- Phone 0115 9821111
- Fax 0115 9825275
- Email sales@scientific-labs.com
- 1.4 Emergency Telephone** (08:00-17:00) 0115 9821111
(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification**2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Skin corrosion/irritation, category 2

Serious eye damage/irritation, category 2

Spec target organ tox - single, category 3

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



| | |
|--------------------------|---|
| Hazard Statements | Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. |
| Precautionary Statements | Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Do not breathe fumes. Use only outdoors or in a well-ventilated area. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. |

Section 3. Composition

3.1 Substances

| Component | CAS No. | EEC No. | REACH No. | Conc w/w | CLP Classification (1272/2008/CE) |
|-------------------|-----------|-----------|-----------------------|----------|-----------------------------------|
| Hydrochloric acid | 7647-01-0 | 231-595-7 | 01-2119484862-27-XXXX | 18% | Skin Corr. 1A,STOT SE 3 (I) |

Section 4. First Aid

4.1 Description of 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. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION. |
| Inhalation | Remove from exposure. |
| Ingestion | Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY. |
| Personal protection for first aiders | Wear protective gloves / eye protection. |

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

| | |
|---------------------|--|
| Extinguishing Media | Consider what other flammable materials are present and act accordingly. |
| Unsuitable Media | Nothing specified. |

5.2 Special hazards arising from the substance or mixture

| | |
|---------|-----------------------------------|
| Hazards | Presents no specific fire danger. |
|---------|-----------------------------------|

5.3 Advice for firefighters

| | |
|-------------------------|---|
| Advice for firefighters | Consider all other materials in the vicinity. |
|-------------------------|---|

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

| | |
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| Personal Protection | Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. |
|---------------------|--|

6.2 Environmental precautions

| | |
|---------------|--|
| 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. |
|---------------|--|

6.3 Methods and material for containment and cleaning up

| | |
|----------------|--|
| Major Spillage | Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water. |
| Minor Spillage | Neutralise spill with soda ash, lime, calcium carbonate or sodium bicarbonate. Wash area down with copious amounts of water. |

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

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.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

| Component | CAS No | Concentration | Workplace Exposure Limits | | | |
|-------------------|-----------|---------------|---------------------------|------------|-------------------------|------------|
| | | | Long Term (8hr TWA) | | Short Term 15min period | |
| Hydrochloric acid | 7647-01-0 | 18% | 1.0 ppm | 2.0 mg/m-3 | 5.0 ppm | 8.0 mg/m-3 |

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

| | |
|------------------------|--|
| Respiratory Protection | 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. |
| Hand Protection | Use nitrile gloves or PVC gauntlets. |
| Eye Protection | Use tightly fitting chemical splash proof glasses or goggles. |
| Skin Protection | If skin contact or contamination of clothing is likely, protective clothing must be worn. |
| Special Hazards | No special precautions required. |

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|-----------------------|-------------------------------|
| Appearance | Clear colourless liquid. |
| Odour | Odourless. |
| pH | 1 @ 20°C |
| Boiling Point | 108.6°C |
| Melting Point | -55°C |
| Flash Point | Not applicable |
| Upper Flammable Limit | Not applicable |
| Lower Flammable Limit | Not applicable |
| Auto Ignition | Not applicable |
| Explosive Properties | No. |
| Oxidising Properties | No. |
| Vapour Pressure | Not applicable |
| Relative Density | 1.0820 |
| Water Solubility | Completely miscible in water. |

9.2 Other information

No data available.

Section 10. Stability & Reactivity

| | | |
|-------------|------------------------------------|---|
| 10.1 | Reactivity | No data available. |
| 10.2 | Chemical Stability | Stable under normal conditions |
| 10.3 | Possibility of hazardous reactions | No data available. |
| 10.4 | Conditions to Avoid | No specific conditions. |
| 10.5 | Incompatible Materials | Alkalis. Potassium permanganate. Reacts with most metals to produce extremely flammable hydrogen gas. |
| 10.6 | Hazardous Decomposition Products | Will decompose to emit toxic and irritant fumes of hydrogen chloride. |

Section 11. Toxicological Information

11.1 Information on toxicological effects

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| Eyes | The liquid will be irritating to the eyes. |
| Skin | The liquid will be an irritant on brief or occasional exposure. May cause burns on prolonged contact. |
| LD50 Skin | Not available |
| Ingestion | Ingestion of large amounts may produce severe mouth burns, and if swallowed extensive damage to the oesophagus. Symptoms may include salivation, thirst, difficulty in swallowing, pain, shock and vomiting. |
| LD50 Oral | Not available |
| Inhalation | May produce irritation of the respiratory tract. |
| LD50 Inhalation | Not available |
| TCLo | Not available |
| Carcinogenicity | Not considered to be a carcinogen. |
| Mutagenicity | Not considered to be a mutagen. |
| Reproductive Effects | None identified. |
| Other Information | 5-10ppm is the threshold for irritation with severe irritation occurring at 50-100 ppm. |

Section 12. Ecological

| | | |
|-------------|----------------------------------|---|
| 12.1 | Toxicity | Neutralised material presents no specific environmental hazard. |
| | LC50 Algal | Not available |
| | LC50 Crustacea | Not available |
| | LC50 Fish | Not available |
| 12.2 | Persistence and degradability | No data available. |
| 12.3 | Bioaccumulative potential | No data available. |
| 12.4 | Mobility in soil | No data available. |
| 12.5 | Results of PBT & vPvB assessment | Assessment not required. |
| 12.6 | Other adverse effects | None known at present. |

Section 13. Disposal Considerations

13.1 Waste treatment methods

| | |
|------------------------|--|
| Disposal Methods | Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water. |
| Contaminated Packaging | Carefully neutralise with a weak sodium hydroxide solution then wash out thoroughly with water. Use a licensed waste disposer. |

Section 14. Transport Information

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|--|----------------------------------|
| 14.1 UN Number | 1789 |
| 14.2 Proper Shipping Name | Hydrochloric acid |
| 14.3 Transport classes | |
| UN classification | 8 |
| Subsidiary hazard(s) | None |
| Transport category | 2 |
| ADR Hazard ID | 80 |
| Tunnel Restriction Code | E |
| 14.4 Packing Group | II |
| 14.5 Environment hazards | See section 12. |
| 14.6 Special precautions for user | No special precautions required. |
| 14.7 Transport in bulk | Not transported in bulk. |



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Spec target organ tox - single, category 3

Signal word Warning

Hazard Pictograms



Hazard Statements H315, H319, H335
Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statements P264, P280, P260, P271, P332+P313, P337+P313
Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Do not breathe fumes. Use only outdoors or in a well-ventilated area. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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