

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product Identifier

Trade Name: Hydrochloric Acid 28%
Index No: 017-002-01-X
CAS No: 7647-01-0
EC No: 231-595-7
Registration No: 01-2119484862-27-xxxx

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Uses: At this time we do not have information on identified uses
Restrictions: At this time we do not have information on use restrictions

1.3 Details of the supplier of the safety data sheet

Company: Complete Pool Controls Ltd
Unit 2, The Park
Stoke Orchard
Bishops Cleeve
Gloucestershire
GL52 7RS

Telephone: +44 (0) 8712 229081
Fax: +44 (0) 8712 229083
E-mail: sales@cpc-chemicals.co.uk

1.4 Emergency Telephone

Tel: +44 (0) 8712 229081 (office hours) +44 (0) 1242 300271 (outside of office hours)

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Hazard Class	Hazard Category	Target Organs	Hazard Statements
Corrosive to metals	Category 1		H290
Skin Corrosion	Category 1B		H314
Specific target organ toxicity- single exposure	Category 3		H335

For the full text of the H statements mentioned in this section see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Hazard Symbol/Category of danger	Risk phrases
Corrosive (C)	R34
Irritant	R37

For the full text of the R phrases mentioned in this section see Section 16.

Most important adverse effects

Human Health: See section 11 for toxicological information
Physical & Chemical Hazards: See section 9 for physicochemical information
Potential environmental effects: See section 12 for environmental information

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols:



Signal word: Danger

Hazard statements: H290 May be corrosive to metals
H314 Causes severe skin burns and eye damage
H335 May cause respiratory irritation

Trade Name: Hydrochloric Acid 25 - 36%

2. Hazard Identification

Precautionary statements:

Prevention: P280: Wear protective gloves/protective clothing/eye protection/face protection

Response: P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P308+310: If exposed or concerned: Immediately call a POISON CENTRE or doctor/physician

Hazardous components which must be listed on the label

Hydrochloric acid

2.3 Other Hazards No other information is available

3. Composition/information on ingredients

3.1 Substances

Chemical nature: Aqueous solution

Chemical Name	Identification Numbers	Hazard Class	Amount %
hydrochloric acid	Index-No: 017-002-01-X	Met Corr.1	
	Cas No: 7647-01-0	STOT SE3	>=25 - <=36
	EC No: 231-595-7	Skin Corr 1B	

4. First Aid measures

4.1 Description of first aid measures

General Advice: Take off all contaminated clothing immediately.

If Inhaled: In case of accident by inhalation; remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact: Wash off immediately with plenty of soap & water. If irritation appears seek medical advice

In case of eye contact: Rinse immediately with plenty of water, also under eyelids for at least 15 minutes. Remove contact lenses. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.

If swallowed: Clean mouth with water and drink plenty of water. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice. If a person vomits when lying on his back place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Corrosive effects

Effects: No further information available

4.3 Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically

No further information available

5. Fire fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and
Unsuitable extinguishing media:	No information available

5.2 Special hazards arising from the substance or mixture

Specific Hazards during fire:	Fire may cause evolution of Hydrogen chloride gas Gives off hydrogen by reaction with metals
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5.3 Advice for firefighters

Special protective equipment:	In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit).
Further Information:	Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise -with a risk of bursting. Suppress (knock down) gases/vapours/mists with a water spray jet. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours. For personal protection see Section 8.
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6.2 Environmental precautions

Environmental precautions:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration If the product contaminates rivers and lakes or drains - inform respective authorities. If material reaches soil inform authorities responsible for such cases.
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6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders) Keep in suitable closed containers for disposal.
Further Information:	Treat recovered material as described in the section 'Disposal considerations'

6.4 Reference to other sections

For personal protection see Section 8

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:	Handle open container with care. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
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Hygiene measures:	Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of the work day. Take off all contaminated clothing immediately. Provide adequate ventilation. Avoid contact with the skin and eyes.
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7.2 Conditions for safe storage, including any incompatibilities.

Requirements for storage areas and containers:	Keep in an area equipped with acid resistant flooring. Suitable materials for containers: glass Polypropylene polyethylene. Unsuitable materials: Metals.
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Advice on protection against fire and explosion:	The product is not flammable. Gives off hydrogen by reaction with metals. Risk of explosion.
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Further information:	Keep container tightly closed. Keep in a well-ventilated place. Store in a cool place.
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Advice on common storage:	Keep away from food, drink and animal feedstuffs. Corrosive in contact with metals. Materials to avoid sodium hypochlorite, alkalis.
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German storage class:	8B: Corrosive substances
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Storage Temperature:	No further information available
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7.3 Specific end uses

Specific use(s)	No information available
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8. Exposure control/personal protection

8.1 Control parameters

Component: hydrochloric acid	Other OELs	CAS No: 7647-01-0
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Regulatory Basis:	EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.
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Regulatory List:	EU ELV
Value type:	Short Term Exposure Limits (STEL)
Value:	10 ppm
Value:	15 mg/m ³
Remarks:	Indicative

8. Exposure control/personal protection**8.1 Control parameters****Component:** hydrochloric acid**CAS No:** 7647-01-0

Regulatory Basis: EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.

Regulatory List: EU ELV
 Value type: Short Term Exposure Limit (STEL)
 Value: 10 ppm
 Value: 15 mg/m³
 Remarks: Indicative

Regulatory List: EU ELV
 Value type: Time Weighted Average (TWA):
 Value: 5 ppm
 Value: 8 mg/m³
 Remarks: Indicative

Regulatory Basis: UK. EH40 Workplace Exposure Limits (WELS)
 Regulatory List: Time Weighted Average (TWA):
 Value type: Gas and aerosol mists
 Value: 1 ppm
 Value: 2 mg/m³

Regulatory Basis: UK. EH40 Workplace Exposure Limits (WELS)
 Regulatory List: EH40 WEL
 Value type: Short Term Exposure Limit (STEL)
 Value: 5 ppm
 Value: 8 mg/m³

8.2 Exposure controls**Engineering measures**

Refer to protective measures listed in sections 7 and 8

Personal protective equipment**Respiratory protection**

Advice: Use respirator with appropriate filter if vapours or aerosol are released
 Required, if exposure limit is exceeded
 Combination filter: E-P2

Hand protection

Advice: The glove material has to be impermeable to the product/the substance/preparation. Take note of the information given by the producer concerning permeability, break through times, and of special and of special working conditions (mechanical strain, Protective gloves should be replaced at first sign of wear.

Material: butyl rubber, Nitrile rubber, Polyvinylchloride, Fluorinated rubber, Polychloroprene
 Gloves >= 8 h

Eye protection Advice: Tightly fitting safety goggles

Skin and body protection

Advice: acid resistant protective clothing

Environmental exposure controls

General advice: Do not flush into surface water or sanitary sewer systems
 Avoid subsoil penetration
 If the product contaminates rivers and lakes or drains inform respective authorities.
 If the product reaches soil inform respective authorities.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Liquid
Colour:	Colourless to yellowish
Odour:	Stinging
Odour Threshold:	Currently we do not have any information from our supplier about this.
pH @ 20°C:	,0.1
Solidification point	-40 ° C
Boiling point:	ca. 90 ° C
Flash point:	not applicable
Evaporation rate:	Currently we do not have any information from our supplier about this.
Flammability (solid, gas)	does not ignite
Upper explosion limit:	not applicable
Lower explosion limit:	not applicable
Vapour pressure:	21.8 hPa
Relative vapour density:	Currently we do not have any information from our supplier about this.
Density @ 20°C:	1.15 - 1.17g/cm ³
Water solubility:	Completely soluble
Partition coefficient:n-octanol/water:	-0.25 log Pow
Ignition temperature:	not applicable
Thermal decomposition:	Currently we do not have any information from our supplier about this.
Viscosity, kinematic:	1.74 mPa.s 20 ° C
Explosive properties:	Not explosive
Oxidising properties:	Currently we do not have any information from our supplier about this.

9.2 Other Information No further information available

10. Stability and reactivity

10.1 Reactivity

Advice: This product is a very reactive substance that can react with many inorganic

10.2 Chemical stability

Advice: No decomposition if stored and applied as directed

10.3 Possibility of hazardous reactions

Hazardous reactions: Hydrogen, by reaction with metals, Explosive properties; alkalines

10.4 Conditions to avoid

Conditions to avoid No information available

10.5 Incompatible materials

Materials to avoid	Metals	sodium hypochlorite
	Amines	flourines
	Strong oxidising agents	chlorites
	cyanides	alkalines

10.6 Hazardous decomposition products

Hazardous decomposition products: Hydrogen chloride gas

Trade Name: Hydrochloric Acid 25 - 36%

11. Toxicological Information

11.1 Information on toxicological effects

Product: hydrochloric acid

CAS No: 7647-01-0

Acute Toxicity Oral

Value type LD50
Value 900 mg/kg
Species rabbit

Acute toxicity Dermal

Value type LD50
Value 5,010 mg/kg
Species rabbit

12. Ecological Information

12.1 Toxicity

Product: hydrochloric acid

CAS No: 7647-01-0

Acute toxicity Fish

Species: Oncorhynchus mykiss
Exposure time: 96h
Value type: LC50
Value: 7.45 mg/l

Toxicity to daphnia and other aquatic invertebrates

Species: Daphna magna
Exposure time: 48 h
Value type: EC50
Value: 0.492 mg/l

algae

Species: Pseudokirchneriella subcapitata
Exposure time: 72 h
Value type: EC50
Value: 0.78 mg/l

12.2 Persistence and degradability

Persistence Remarks: No data available

Biogradability Remarks: Inorganic product which is not removable from water by biological processes

12.3 Bioaccumulative potential

Remarks: Bioaccumulation is not expected log Pow <1

12.4 Mobility in soil

Remarks: Expected to absorb on soil

12.5 Results of PBT and PvB

Remarks: Not classified

12.6 Other adverse effects

Additional ecological information

Remarks: All numerical values for ecotoxicity effects are calculated on the pure substances.
Harmful effects to aquatic organisms due to pH shift
Neutralization is normally necessary before waste water is discharged into water treatment plants.
Do not flush into surface water or sanitary water system

Trade Name: Hydrochloric Acid 25 - 36%

13. Disposal Considerations

13.1 Waste treatment methods

Product: Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste

Contaminated packaging: Empty contaminated packaging's thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue No: No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport Information

14.1 UN Number 1789

14.2 UN proper shipping name

ADR: Hydrochloric Acid
RID: Hydrochloric Acid
IMDG: Hydrochloric Acid

14.3 Transport hazard class(es)

ADR Class 8
(Label, classification code; Hazard ID; Tunnel 8;C1;80; (E)
RID Class 8
(Label, Classification Code; Hazard ID;) 8;C1;80;
IMDG Class 8
(Labels; EmS) 8, F-A,S-B

14. Transport Information

14.4 Packaging Group

ADR: II
RID: II
IMDG: II

14.5 Environmental hazards

Labelling according to 5.2.1.8 ADR: no
Labelling according to 5.2.1.8 RID: no
Labelling according to 5.2.1.8 IMDG: m
Classification as environmentally hazardous according to 2.9.3 IMDG: no

14.6 Special precautions for user

Note: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG: Not applicable

Trade Name: Hydrochloric Acid 25 - 36%

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for this substance or mixture.

UK ISR:	hydrochloric acid. Annual reporting level threshold; 10,000kg	
Regulatory List	Notification	Notification No
AICS	YES	
DSL	YES	
INV (CN)	YES	
ENCS (JP)	YES	(1) - 215
ISHL (JP)	YES	(1) - 215
TSCA	YES	
EINECS	YES	231-595-7
KECI (KR)	YES	97-1-203
KECI (KR)	YES	KE-20189
PICCS (PH)	YES	

15.2 Chemical Safety Assessment

Currently we do not have any information from our supplier about this.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R34	Causes burns
R37	Irritating to respiratory system

Full text of H-statements referred to under sections 2 and 3

H314	Causes severe skin burns and eye damage
H355	May cause respiratory respiration

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

• Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuse par Route (European Agreement concerning the
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR	Dangerous goods Regulations by the 'International Air Transport Association' (IATA)
ICAO:	International Civil Aviation Organization
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS	European Inventory of Existing Commercial Chemical Substances.
CAS:	Chemicals Abstracts Service (division of the American Chemical Society)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent

Revision	Date	By	Amendment
1	18/10/10	Linda Brueford	
2	11/03/11	Linda Brueford	GHS label elements added, updated to European requirements and other minor editorial amendments