Trafalgar Chemicals - Safety Data Sheet

3106-DC

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021
Date printed: 18 September 2025

Section 1. Identification

1.1 Product Identifier 3106-DO

Product Name HYDROCHLORIC ACID 32% w/w tech. 5L.

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 HCl =36.46

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Trafalgar Chemicals

TRAFALGAR CHEMICALS Trafalgar Scientific Ltd. 190 Waterside Road

Leicestershire LE5 1QZ

UNITED KINGDOM

Phone 0116 2879460

Email info@trafalgarscientific.co.uk Website www.trafalgarscientific.co.uk

1.4 Emergency Telephone (08:00-17:00) +44(0) 116 2879460

(24hr) 112

(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Skin corrosion/irritation, category 1B H314: Causes severe skin burns and eye damage.

Spec target organ tox - single, category 3 H335: May cause respiratory irritation.

2.2 Label elements

Labelling according to regulation (EC) 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Signal word Danger

Hazard Pictograms





Hazard Statements Causes severe skin burns and eye damage. May cause respiratory irritation.

Precautionary Statements

Do not breathe fume/vapours. Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Use only outdoors or in a well-ventilated area. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Store in a well ventilated place. Keep container tightly closed.

Section 3. Composition

3.1 Substances

Component	CAS No.	EC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Hydrochloric acid	7647-01-0	231-595-7	01-2119484862-27-XXXX	32%	Skin Corr. 1B,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.

OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If

breathing stops or shows signs of failing, apply artificial resuscitation. If conscious place in a sitting position.

OBTAIN MEDICAL ATTENTION UNGENTLY.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. If unconscious place in the recovery position.

OBTAIN MEDICAL ATTENTION URGENTLY.

Personal protection for first Wear protective gloves / eye protection.

aiders

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 May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Avoid breathing vapour. 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	32%	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

maintained chemical cartridge respirator, or use self contained breathing apparatus.

Hand Protection Use PVC gauntlets.

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 Colourless fuming liquid.
Odour Pungent and intensely irritating.

 pH
 1 @ 20°C

 Boiling Point
 109°C

 Melting Point
 -25°C

Flash Point Not applicable
Upper Flammable Limit
Lower Flammable Limit
Auto Ignition Not applicable
Not applicable
Not applicable

Explosive Properties No. Oxidising Properties No.

Vapour Pressure 11.2509mmHg @ 20°C

Relative Density 1.1600

Water Solubility Completely soluble in water with moderate increase in temperature.

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 No data available.

reactions

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

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes Both the vapour and liquid will be extremely irritating to eyes and can cause chemical eye burns.

Skin The liquid or concentrated vapour will cause burns. Severe ulceration and scarring may occur in serious cases.

Repeated exposure may cause dermatitis.

LD50 Skin Not available

Ingestion Ingestion will cause 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 Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes,

nose, throat and respiratory tract. High concentrations of vapour will seriously damage the membranes lining the

nose, throat and upper 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. Dangerous to aquatic organism: causes damage to

crops and vegetables.

LC50 Algal Not available
LC50 Crustacea Not available
LC50 Fish Not available

12.2 Persistence and No data available.

degradability

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 Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number 1789

14.2 Proper Shipping Name Hydrochloric acid

14.3 Transport classes

UN classification Subsidiary hazard(s) None Transport category 2 ADR Hazard ID 80 **Tunnel Restriction Code** Ε 14.4 Packing Group II

14.5 Environment hazards See section 12.

14.6 Special precautions for No special precautions required.

user

14.7 Transport in bulk Not transported in bulk.



Section 15. Regulatory Information

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

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE) as amended by GB-CLP Regulation, UK SI 2019/720 & UK SI 2020/1567

Classification Skin corrosion/irritation, category 1B; Spec target organ tox - single, category 3

Signal word Danger

Hazard Pictograms





Hazard Statements H314, H335

Causes severe skin burns and eye damage. May cause respiratory irritation.

Hazard Statements (Packs

of 125ml/g or less)

H314, H335

Causes severe skin burns and eye damage. May cause respiratory irritation.

Precautionary Statements P260, P264, P280, P271, P303+P361+P353, P403+P233

Do not breathe fume/vapours. Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. Use only outdoors or in a well-ventilated area. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Store in a well ventilated place. Keep container tightly

closed.

Precautionary Statements (Packs of 125ml/g or less) P260, P264, P280

Do not breathe fume/vapours. Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection.

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.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 18 September 2025

Copyright: 2025 Trafalgar Chemicals