

# LIMEAWAY

## Safety Data Sheet

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name: **LIMEAWAY**

**Synonyms**

HYDROCHLORIC ACID 32%

**Product Code**

790

**Recommended use:** Acidic descaler.

**Supplier Name** CLEAN PLUS CHEMICALS PTY LTD

**Address** 16 George Young Street AUBURN NSW 2144

**Telephone** 02 9738 7444

**Emergency** 1800 201 700

**Email** customerservice@cleanplus.com.au

**Web Site** www.cleanplus.com.au

**SDS Date** 21 JANUARY 2021 Version 1.2

### SECTION 2: Hazards identification

**THIS PRODUCT IS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA.**

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Corrosive to metals (Category 1), H290

Skin corrosion (Category 1B), H314

Specific target organ toxicity - single exposure (Category 3), Respiratory system, 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**

C Corrosive R34

Xi Irritant R37

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

#### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Danger

Hazard statement(s)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statement(s)

P234 Keep only in original container.

P260 Do not breathe vapours.

P264 Wash hand thoroughly after handling.

P271 Use only outdoor or in a well-ventilated area.

# LIMEAWAY

## Safety Data Sheet

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant/ container with a resistant innerliner.

2.3 Other hazards None

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixture

##### Hydrochloric acid

Synonyms Chlorohydric acid, Hydrogen chloride, Muriatic acid, Spirits of salt.

CAS-No	EC-No	EC-Index-No	Formula	Molecular Weight	Weight %
7647-01-0	231-595-7	017-002-01-X	HCl	36.46 g/mol	32

##### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Concentration	Classification
<b>Hydrochloric acid</b>		
CAS-No 7647-01-0 EC-No 231-595-7 EC-Index-No 017-002-01-X	32%	Corrosive to metals (Category 1), H290 Skin corrosion (Category 1B), H314 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

##### Hazardous ingredients according to Directive 1999/45/EC

Component	Concentration	Classification
<b>Hydrochloric acid</b>		
CAS-No 7647-01-0 EC-No 231-595-7 EC-Index-No 017-002-01-X	32%	C, Corrosive, R34 Xi, Irritant, R37

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing

# LIMEAWAY

## Safety Data Sheet

	or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus.
Skin contact	Remove contaminated clothing and wash affected skin with soap and water. Dab with polyethylene glycol 400. If signs of poisoning appear, treat as for inhalation. Obtain medical attention. Wash contaminated clothing before reuse.
Eye contact	If the substance has got into the eyes, immediately wash out with plenty of water at least 15 minutes. Obtain medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention. Never give anything by mouth to an unconscious person.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and section 11

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

After swallowing: make victim drink water (two glasses at the most), avoid vomiting (risk of perforation). Immediately call in physician. Do not attempt to neutralize.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

In adaption to materials stored in the immediate neighborhood.

#### 5.2 Special hazards arising from the substance or mixture

Non-combustible. Hydrogen may form upon contact with metals (danger of explosion). Ambient fire may liberate hazardous vapors. The following may develop in event of fire: Hydrochloric acid.

#### 5.3 Advice for firefighters

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

#### 5.4 Further information

Contain escaping vapors with water. Prevent fire-fighting water from entering surface water or ground water.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Wear a positive-pressure supplied-air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Contain or absorb leaking liquid with sand or earth, consults an expert. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil, advise police.

#### 6.3 Methods and materials for containment and cleaning up

Spillage : soak up with inert absorbent material (e.g. sand, silica gel). Prevent liquid entering sewers, basements and workpits. Transfer to covered drums. Dispose of promptly.

#### 6.4 Reference to other sections

For disposal see **Section 13**.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Provision of good ventilation in the working area. The floor must be acid resistant. Suitable materials: Glass, Stoneware, porcelain, Polyvinyl chloride, Polyethylene ( PE), Polypropylene, Polytetrafluoroethylene PTFE (Teflon). Do not leave container open. Avoid spillage.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed at room temperature in a dry, cool and well-ventilated place. Keep out of direct sunlight and away from heat, water and incompatible materials. Requirements for containers, no metal containers.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### 8.1 Control parameters

##### Derived No Effect Level (DNEL)

Application Area	Health Effects	Exposure	Value
Worker	Long-term Local effects	Inhalation	8 mg/m <sup>3</sup>
Consumer	Long-term Local effects	Inhalation	8 mg/m <sup>3</sup>

##### Predicted No Effect Concentration (PNEC)

Not Available

#### 8.2 Exposure controls

##### Appropriate engineering controls

The product should only be used in ventilation hoods and fans.

##### Individual protection measures (Personal protective equipment, PPE)

##### Eye/face protection

Goggles giving complete protection to eyes.

##### Skin protection

Chemical resistant apron / corrosive protective clothing, heavy duty work shoes.

Handle with gloves

- Full contact wears gloves from nitrile rubber material.
- Splash contact wears gloves from natural latex material.

The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

##### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapor/aerosols are generated filter E-(P2) (EN 141 or EN 14387).

##### Environmental exposure controls

Prevent liquid entering sewers, basements and workpits.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance: From	Liquid
: Color	Colorless
Odour	Pungent
Odour Threshold	Not Available

# LIMEAWAY

## Safety Data Sheet

pH	<1 at 20°C
Melting point/range	-43°C
Boiling point/range	80°C
Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Explosion limits: lower	Not Available
upper	Not Available
Vapor Pressure	21.3 hPa at 20°C
Relative Vapor Density	Not Available
Density	1.16 g/ml at 20°C
Water solubility	Soluble at 20°C
Partition coefficient (n-octanol/water)	Not Available
Auto-Ignition temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	1.9 mPa.s
Explosive properties	Not Explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Corrosive in contact with metals. Reacts with alkalis, strong oxidizing agents and strong bases.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Risk of explosion in contact with alkali metals, conc. sulphuric acid, potassium permanganate.

The substance can react dangerously with aluminium, alkali hydroxide, amines, ammonia, fluorine, bases, oxidizing agents, metal carbides, calcium hydride, formaldehyde, copper sulphide, lithium silicide, metals, sodium hydride, sodium hypochlorite and its solutions, silanes, silicon dioxide, vinyl methyl ether and zinc.

#### 10.4 Conditions to avoid

Heat

#### 10.5 Incompatible materials

Aluminium, amines, carbides, hydrides, fluorine, potassium permanganate, strong alkali, salts of oxyhalogenic acids, conc sulfuric acid, semimetallic oxide, semimetallic hydrogen compounds, aldehydes, sulfides, lithium silicide, vinylmethyl ether.

Incompatible with various metals and metal alloys.

#### 10.6 Hazardous decomposition products

Hydrogen gas (Hazardous decomposition products from under contact with metals). Danger of explosion.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Mixture

##### Acute toxicity

Not Available

##### Acute oral toxicity

Symptoms: burns in mouth, throat, oesophagus and gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

# LIMEAWAY

## Safety Data Sheet

### Acute inhalation toxicity

Irritations of the mucous membranes, coughing, and dyspnoea.

### Skin corrosion/irritation

Burns

### Serious eye damage/eye irritation

Burns, Risk of blindness

### Respiratory or skin sensitization

Not Available

### Germ cell mutagenicity

Not Available

### Carcinogenicity

Not Available

### Reproductive toxicity

Not Available

### Teratogenicity

Not Available

### Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation.

### Specific target organ toxicity (STOT) - repeated exposure

Not Available

### Aspiration hazard

Not Available

### Further information

After a latency period: cardiovascular failure.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish

LC<sub>50</sub> Leuciscus idus: 862 mg/l (1N solution)

### 12.2 Persistence and degradability

Not Available

### 12.3 Bioaccumulative potential

Not Available

### 12.4 Mobility in soil

Not Available

### 12.5 Other adverse effects

Forms corrosive mixtures with water even if diluted. Damage to plant growth. The following applies to Hydrochloric acid general: Harmful effect on aquatic organisms. Harmful effect due to pH shift. Do not allow to enter waters, waste water or soil.

# LIMEAWAY

## Safety Data Sheet

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

##### Contaminated packaging

Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

### SECTION 14: Transport information

#### Land Transport (ADR/RID)

UN Number	1789
UN proper shipping name	HYDROCHLORIC ACID
Transport hazard class(es)	8
Packaging group	II
Environmental hazards	No
Special precautions for user	Yes



#### Sea transport (IMDG)

UN Number	1789
UN proper shipping name	HYDROCHLORIC ACID
Transport hazard class(es)	8
Packaging group	II
Marine pollutant	No
Special precautions for user	Yes
EmS	F-A S-B



#### Air transport (IATA)

UN Number	1789
UN proper shipping name	HYDROCHLORIC ACID
Transport hazard class(es)	8
Packaging group	II
Environmental hazards	No
Special precautions for user	No



#### River transport (AND/ADNR) (Not examined)

### SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Not Available

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

# LIMEAWAY

## Safety Data Sheet

### SECTION 16: Other information

#### Additional Information

##### ABBREVIATIONS:

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EINECS - European Inventory of Existing Commercial Substances.

GHS - Globally Harmonized System

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m<sup>3</sup> - Milligrams per cubic meter.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

##### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Clean Plus Chemicals report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

##### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Clean Plus Chemicals report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

#### Report Status

This Safety Data Sheet document has been compiled by Clean Plus Chemicals. Further clarification regarding any aspect of this product should contact Clean Plus Chemicals directly. While Clean Plus Chemicals has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Clean Plus Chemicals accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.