

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Relax Total Alkalinity Reducer
- Datasheet Number: SDS 080
- Chemical Name: Hydrochloric acid 10 %
- CAS No.: 7647-01-0
- EC No.: 231-595-7
- REACH Registration Number: 01-2119484862-27-XXXX

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

- Use of the substance/mixture: Pool / spa treatment
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Plastica Ltd
- Address of Supplier: Perimeter House
Napier Road
St Leonards-on-Sea
East Sussex
United Kingdom
TN38 9NY
- Telephone: +44 (0) 1424 857857
- Email: info@plasticapools.net

1.4 Emergency telephone number

- Emergency Telephone: 0800 043 0891 (technical)
0800 043 0892 (emergency)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Met. Corr. 1, H290; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335
- Additional information: For full text of Hazard and EU Hazard statements: see section 16

2.2 Label elements



Signal Word: Warning

Hazard statements

- H290 - May be corrosive to metals.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.

Precautionary statements

- P102 - Keep out of reach of children.
- P261 - Avoid breathing mist/vapours/spray
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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SECTION 2: Hazards identification (....)

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container to an authorised waste collection point

Supplemental Hazard information (EU)

None

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII
- Has not been identified as having endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Hydrochloric acid ... %	10 - < 25 %	7647-01-0	231-595-7	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	Eye Irrit. 2 H319: 10 % ≤ C < 25 % STOT SE 3 H335: C ≥ 10 % Skin Corr. 1A H314: C ≥ 25 % Skin Irrit. 2 H315: 10 % ≤ C < 25 % Met. Corr. 1 H290: C ≥ 0.1%	01-2119484862 -27-XXXX	Yes

3.2 Mixtures

- Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

- Rescuers should put on approved personal protective equipment (PPE) before administering first aid
- Rescuers should take suitable precautions to avoid becoming casualties themselves

Contact with eyes

If substance has got into eyes, immediately wash out with plenty of water for several minutes

Irrigate eyes thoroughly whilst lifting eyelids

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Contact with skin

Remove contaminated clothing immediately and drench affected skin with plenty of water

Contaminated clothing should be laundered before reuse

If skin irritation or rash occurs: Get medical advice/attention.

Ingestion

Rinse mouth with water (do not swallow)

Do NOT induce vomiting.

SECTION 4: First aid measures (....)

Give plenty of water to drink
Never give anything by mouth to an unconscious person
Get medical advice/attention.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If unconscious, place person in recovery position
Apply artificial respiration only if patient is not breathing
Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed**Contact with eyes**

Causes redness and irritation

Contact with skin

Causes redness and irritation

Ingestion

May cause burns to mouth and throat
May cause stomach pain

Inhalation

Severely irritating to respiratory system
May cause coughing

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media: Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include hydrogen chloride gas
- Contact with metals may evolve flammable hydrogen gas

5.3 Advice for firefighters

- Evacuate the area and keep personnel upwind
- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Rescuers should take suitable precautions to avoid becoming casualties themselves
- Only trained and authorised personnel should carry out emergency response

SECTION 6: Accidental release measures (....)

- Personal precautions for non-emergency personnel: Ensure adequate ventilation; Do not breathe dust/fume/gas/mist/vapours/spray.; Avoid contact with skin and eyes; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear self-contained breathing apparatus (SCBA); Wear suitable protective clothing, eye/face protection and gloves

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Stop leak if safe to do so.
- Avoid formation of spray/mist/aerosols
- Small spills
 - May be neutralized with lime or soda ash
 - Wash to waste with plenty of water
- Large spills
 - Absorb spillage in suitable inert material
 - Place in sealable container
 - Seal containers and label them
 - Remove contaminated material to safe location for subsequent disposal
 - Ventilate the area and wash spill site after material pick-up is complete
 - Seek expert advice for removal and disposal of all contaminated materials and wastes

6.4 Reference to other sections

- See section(s): 7, 8 & 13

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Use only in well ventilated areas
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Avoid contact with skin and eyes
- Wear goggles giving complete eye protection
- Wear protective clothing as per section 8
- Contaminated clothing should be laundered before reuse
- Use good personal hygiene practices
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.
- Ensure eyewash stations and safety showers are nearby

7.2 Conditions for safe storage, including any incompatibilities

- Store in a demarcated bunded area
- Keep in an area equipped with acid resistant flooring.
- Store in a cool, dry well-ventilated place. Keep container tightly closed.
- Store in suitable plastic containers
- Storage containers should not be made from metal
- Avoid freezing
- Avoid high temperatures
- Keep away from food, drink and animal feedingstuffs
- Incompatible with alkali and organic bases; lime stone, marble, dolomite, and other carbonic minerals; strong oxidants; reducing agents; sulphides; sulphites; perchlorates; peroxides; nitrates;

7.3 Specific end use(s)

SECTION 7: Handling and storage (....)

- Pool / spa treatment
-

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Hydrochloric acid ... %

- (EU) OELV (long term TWA) 5 ppm 8 mg/m³
- (EU) OELV (short term limit value) 10 ppm 15 mg/m³
- WEL (long term) 1 ppm 2 mg/m³ (UK, gas and aerosol mists)
- WEL (short term limit value) 5 ppm 8 mg/m³ (UK, gas and aerosol mists)
- DNEL (inhalational) 8 mg/m³ Industry, Long Term, Local Effects
- DNEL (inhalational) 15 mg/m³ Industry, Acute/Short Term, Local Effects
- DNEL (inhalational) 8 mg/m³ Consumer, Long Term, Local Effects
- DNEL (inhalational) 15 mg/m³ Consumer, Acute/Short Term, Local Effects

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines
- Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment
Wear approved respirator if exposure likely to exceed WEL/OEL
Where a reusable half mask respirator is required, use EN 140 mask and EN 143 particle filter, or EN 1827
Where a full face mask respirator is required, use EN 136, with particle filter EN 143
- Eye/face protection
Wear goggles giving complete eye protection approved to standard EN 166.
If risk of splashing, wear face-shield approved to standard EN 166 1B39N
- Skin protection
Wear suitable clothing providing resistance to acids
Wear chemical resistant boots
Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
Glove material: Polychloroprene
Thickness: 0.5 mm
Breakthrough time: > 480 min
Reference: Supplier

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SECTION 8: Exposure controls/personal protection (....)

Glove material: Nitrile rubber
 Thickness: 0.35 mm
 Breakthrough time: > 480 min
 Reference: Supplier

Glove material: Butyl rubber
 Thickness: 0.5 mm
 Breakthrough time: > 480 min
 Reference: Supplier

Glove material: Polyvinylchloride
 Thickness: 0.5 mm
 Breakthrough time: > 480 min
 Reference: Supplier

Glove material: Fluorinated rubber
 Thickness: 0.4 mm
 Breakthrough time: > 480 min
 Reference: Supplier

- Thermal hazards
Not applicable
- Hygiene measures
Do not eat, drink or smoke when using this product.
Use good personal hygiene practices
Wash thoroughly after handling.
Contaminated clothing should be laundered before reuse
Contaminated work clothing should not be allowed out of the workplace.
Ensure eyewash stations and safety showers are nearby
- Environmental exposure controls
Do not empty into drains
Do not allow to penetrate the ground/soil.



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: Colourless
- Odour: Pungent odour
- Melting point/freezing point: < 0 °C
- Boiling point or initial boiling point and boiling range: > 100 °C
- Flammability: Not flammable
- Lower and upper explosion limit: Not applicable
- Flash point: Not applicable
- Auto-ignition temperature: Not applicable
- Decomposition temperature: No data available
- pH: < 1 @ 20 °C
- Kinematic viscosity: No data available
- Solubility: 500 g/L @ 20 °C
- Partition coefficient n-octanol/water (log value): Not applicable, inorganic
- Vapour pressure: 23 hPa @ 20 °C (10% solution)
- Density and/or relative density: 1.05 - 1.12 g/cm³ @ 20 °C
- Relative vapour density: No information available

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SECTION 9: Physical and chemical properties (....)

- Particle characteristics: No information available

9.2 Other information

- May be corrosive to metals
 - Reacts with metals liberating hydrogen
-

SECTION 10: Stability and reactivity

10.1 Reactivity

- No hazardous reactions known if used for its intended purpose

10.2 Chemical stability

- Stable under normal conditions

10.3 Possibility of hazardous reactions

- Reacts with metals liberating hydrogen

10.4 Conditions to avoid

- Avoid extremes of temperature
- Keep away from direct sunlight

10.5 Incompatible materials

- Incompatible with alkali and organic bases; lime stone, marble, dolomite, and other carbonic minerals; strong oxidants; reducing agents; sulphides; sulphites; perchlorates; peroxides; nitrates;

10.6 Hazardous decomposition products

- Decomposition products may include hydrogen chloride gas
-

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- Acute Toxicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	LD ₅₀ (oral, rat)	LC ₅₀ (inhalation, rat)	LD ₅₀ (dermal, rabbit)
Hydrochloric acid ... %	No data available	7 051 mg/m ³	No data available

- Skin corrosion/irritation

Causes skin irritation.

Substances

Chemical Name	Irritation/corrosion
Hydrochloric acid ... %	Adverse effect observed (corrosive)

- Serious eye damage/irritation

Causes serious eye irritation.

Substances

Chemical Name	Irritation/corrosion
Hydrochloric acid ... %	Adverse effect observed (irreversible damage)

- Respiratory or skin sensitisation

Based on available data, the classification criteria are not met

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SECTION 11: Toxicological information (....)

Substances

Chemical Name	Skin sensitisation	Respiratory sensitisation
Hydrochloric acid ... %	No adverse effect observed (not sensitising)	No study available

- Germ cell mutagenicity
No evidence of mutagenic effects

Substances

Chemical Name	Toxicity - In Vitro	Toxicity - In Vivo
Hydrochloric acid ... %	No data available	No data available

- Carcinogenicity
No evidence of carcinogenic effects

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Hydrochloric acid ... %	No data available	15 mg/m ³	No data available

- Reproductive toxicity
No evidence of reproductive effects

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Hydrochloric acid ... %	No data available	No data available	No data available

- Specific target organ toxicity (STOT) - single exposure
May cause respiratory irritation.

Substances

Chemical Name	Route	Remarks
Hydrochloric acid ... %	Respiratory	Adverse effect observed (irritating)

- Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Hydrochloric acid ... %	No data available	15 mg/m ³ local effects 30 mg/m ³ systemic effects	No data available

- Aspiration hazard
Based on available data, the classification criteria are not met
- Contact with eyes
Causes redness and irritation
- Contact with skin
Causes redness and irritation
- Ingestion
May cause burns to mouth and throat
May cause stomach pain

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SECTION 11: Toxicological information (....)

- Inhalation
 - Severely irritating to respiratory system
 - May cause coughing

11.2 Information on other hazards

- Has not been identified as having endocrine disrupting properties
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SECTION 12: Ecological information

12.1 Toxicity

- Based on available data, the classification criteria are not met

Substances

Chemical Name	LC ₅₀ (fish)	EC ₅₀ (aquatic invertebrates)	EC ₅₀ (aquatic algae)
Hydrochloric acid ... %	(24 h) 20.5 mg/L (Lepomis macrochirus)	(48 h) 0.45 mg/L (Daphnia magna)	ErC ₅₀ (72 h) 0.73 mg/L (Chlorella vulgaris)

12.2 Persistence and degradability

Substances

Chemical Name	Biodegradation
Hydrochloric acid ... %	Not applicable, inorganic

12.3 Bioaccumulative potential

Substances

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Hydrochloric acid ... %	Bioaccumulation is not expected	Not applicable, inorganic

12.4 Mobility in soil

Substances

Chemical Name	Adsorption/desorption
Hydrochloric acid ... %	Soluble in water Adsorption to solid soil phase is not expected

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Endocrine disrupting properties

- Has not been identified as having endocrine disrupting properties

12.7 Other adverse effects

- Do not empty into drains
 - Do not allow to penetrate the ground/soil.
 - May cause adverse effects in the aquatic environment due to low pH
-

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
 - This material and/or its container must be disposed of as hazardous waste
-

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SECTION 13: Disposal considerations (....)

- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning
- May be neutralized with lime or soda ash

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
 - Hazardous Property Code(s): HP 4 Irritant; HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
-

SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: 1789

14.2 UN proper shipping name

- Proper Shipping Name: HYDROCHLORIC ACID

14.3 Transport hazard class(es)

- Hazard Class: 8

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Not classified

14.6 Special precautions for user

- No information available

14.7 Maritime transport in bulk according to IMO instruments

- Not applicable

14.8 Road/Rail (ADR/RID)

- ADR UN No.: 1789
- Proper Shipping Name: HYDROCHLORIC ACID
- ADR Hazard Class: 8
- ADR Packing Group: III
- Tunnel Code: (E)

14.9 Sea (IMDG)

- IMDG UN No.: 1789
- Proper Shipping Name: HYDROCHLORIC ACID
- IMDG Hazard Class: 8
- IMDG Packing Group: III

14.10 Air (ICAO/IATA)

- ICAO UN No.: 1789
- Proper Shipping Name: HYDROCHLORIC ACID
- ICAO Hazard Class: 8
- ICAO Packing Group: III

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 (as amended by Regulation (EU) 2020/878) and UK REACH
- The GB Classification, Labelling and Packaging Regulation (GB CLP) applies in Great Britain
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- Restrictions on use according to Annex XVII to REACH Regulation: Entry 3 - Liquid substances or mixtures which are regarded as dangerous
- Seveso III Directive (2012/18/EU, Dangerous Substances in Annex I: Not applicable

15.2 Chemical safety assessment

- A REACH chemical safety assessment has been carried out
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SECTION 16: Other information

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.

Sources of data: Information from published literature and supplier safety data sheets

Revision No. 2.0.0. Revised July 2022.

Changes made: Updated to conform to latest version of REACH

Training advice

- Workers must be informed of the presence of hazardous ingredients and trained in the proper use and handling of this product as required under applicable regulations

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H290: May be corrosive to metals
- H314: Causes severe skin burns and eye damage
- H315: Causes skin irritation.
- H318: Causes serious eye damage
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC₅₀: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LOAEC: Lowest observed adverse effect concentration
- LOAEL: Lowest Observed Adverse Effect Level
- LC₅₀: Lethal Concentration, 50%
- LD₅₀: Lethal Dose, 50%
- NOAEC: No observed adverse effect concentration
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration

SECTION 16: Other information (....)

- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---
