Safety Data Sheet
According to Regulation (EC) No 453/2010

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

1.1 Product identifier
Trade name: Saloo
Code(s): A894, A895, C595

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
For professional and industrial use only.
Acidic Cleaning Product
Uses advised against:
Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

William Clements (Chemicals) Ltd
The Old Transport Museum
Witham Street
Belfast
BT4 1HP
United Kingdom
Tel: +44 (0) 28 9073 8395
Fax: +44 (0) 28 9045 0532
Email: info@clementschemicals.com

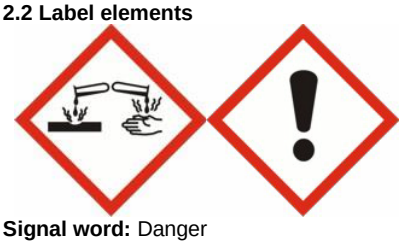
1.4 Emergency telephone number
+44 (0) 28 9073 8395 8.00am – 5.00pm Monday - Friday

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Corrosive to metals	Category 1	H290
Skin corrosion	Category 1B	H314

2.2 Label elements



Signal word: Danger
Contains: hydrochloric acid

Hazard statements:
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
:
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.
P308 IF exposed or concerned:
P310 Immediately call a POISON CENTER or doctor/ physician.

2.3 Other hazards
No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC Number	CAS Number	Reach Number	Classification	Weight percent
Hydrochloric Acid	**231-595-7**	**7647-01-0**	**01-2119484862-27-xxxx**	**Met. Corr.1 H290 STOT SE3 H335**	**5-15**

				Skin Corr.1B H314	

For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Take off all contaminated clothing immediately.

If inhaled
If unconscious place in recovery position and seek medical advice. Remove to fresh air.

In case of skin contact
Wash off immediately with soap and plenty of water. Call a physician immediately.

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

If swallowed
Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.

Self-protection of first aider
Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms Corrosive effects
Effects See Section 11 for more detailed information on health effects and symptoms

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

SECTION 5: Firefighting measures

5.1 Extinguishing media
The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture
Under fire conditions: Hydrogen chloride gas, Gives off hydrogen by reaction with metals.

5.3 Advice for firefighters

Special protective equipment for firefighters
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 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Keep people away from and upwind of spill/leak. Provide adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours.

6.2 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.

6.3 Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal. Flush away residuals with plenty of water.

6.4 Reference to other sections
See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Handle and open container with care. Use personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Emergency eye wash should be available in the immediate vicinity.

Hygiene measures
Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

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 containers; Unsuitable materials for containers: Metals

Advice on protection against fire and explosion
The product is not flammable. Gives off hydrogen by reaction with metals. Risk of explosion.

Further information on storage conditions
Keep container tightly closed. Keep in a well-ventilated place. Keep away from heat.

Advice on common storage
Keep away from food, drink and animal feeding stuffs. Corrosive in contact with metals Materials to avoid: sodium hypochlorite, alkalis

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Component: hydrochloric acid CAS-No. 7647-01-0

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)
DNEL
Workers, Acute - local effects, Inhalation 15 mg/m3
DNEL
Workers, Long-term - local effects, Inhalation 8 mg/m3

Predicted No Effect Concentration (PNEC)
Fresh water 36 µg/l
Marine water 36 µg/l
Intermittent releases 45 µg/l
Sewage treatment plant (STP) 36 µg/l

Other Occupational Exposure Limit Values
EU ELV, Short Term Exposure Limit (STEL):
10 ppm, 15 mg/m3
Indicative

EU ELV, Time Weighted Average (TWA):
5 ppm, 8 mg/m3
Indicative

EH40 WEL, Time Weighted Average (TWA):, Gas and aerosol mists.
1 ppm, 2 mg/m3

EH40 WEL, Short Term Exposure Limit (STEL):, Gas and aerosol mists.
5 ppm, 8 mg/m3

ELV (IE), Time Weighted Average (TWA):
5 ppm, 8 mg/m3
Indicative OELV

ELV (IE), Short Term Exposure Limit (STEL):
10 ppm, 15 mg/m3
Indicative OELV

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Appropriate engineering controls:

Refer to protective measures listed in sections 7 and 8.
Personal protective equipment
Respiratory protection
Advice: In case of insufficient ventilation, wear suitable respiratory equipment.
Required, if exposure limit is exceeded (e.g. OEL). Combination filter:E-P2

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

Material: butyl-rubber
Break through time: >= 8 h
Glove thickness: 0.5 mm

Material: Nitrile rubber
Break through time: >= 8 h
Glove thickness: 0.35 mm

Material: polychloroprene
Break through time: >= 8 h
Glove thickness: 0.5 mm

Material: Fluorinated rubber
Break through time: >= 8 h
Glove thickness: 0.4 mm

Material: Polyvinylchloride
Break through time: >= 8 h
Glove thickness: 0.5 mm

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 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Physical State: Liquid
Colour: Pink
Odour: Stinging
Odour threshold: Not applicable
pH: <1
Melting point/freezing point (°C): Not determined
Initial boiling point and boiling range (°C): Not determined
Flash point (°C): Not applicable.
Sustained combustion: Not determined
Evaporation rate: Not determined
Flammability (solid, gas): Not determined
Upper/lower flammability limit (%): Not determined
Vapour pressure: Not determined
Vapour density: Not determined
Relative density: 1.02 g/cm³ (20 °C)
Solubility in / Miscibility with Water: Fully miscible
Autoignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: ~5 mPa.s (20C)
Explosive properties: Not explosive
Oxidising properties: Not oxidising

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Corrosive

Substance data, dissociation constant, if available:

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
Hydrogen, by reaction with metals Explosive properties May develop chlorine if mixed with sodium hypochlorite or oxidizing agents (e.g. potassium permanganate, magnesium oxide and hydrogen peroxide).

10.4 Conditions to avoid
Heat

10.5 Incompatible materials
Materials to avoid: Metals, sodium hypochlorite, Amines, fluorine, Strong oxidizing agents, Chlorite, Cyanides, alkalines

10.6 Hazardous decomposition products
Hydrogen chloride gas

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Hydrochloric Acid
Oral
no data available
Inhalation
no data available
Dermal
Please find this information in the listing of the component/components below in the MSDS.
Irritation
Skin
Result: Causes skin burns.
Eyes
Result: Causes eye burns.
Sensitisation
Result: Please find this information in the listing of the component/components below in the MSDS.

CMR effects
CMR Properties
Carcinogenicity
:
Please find this information in the listing of the component/components below in the MSDS.
Mutagenicity: Please find this information in the listing of the component/components below in the MSDS.
Teratogenicity: Please find this information in the listing of the component/components below in the MSDS.
Reproductive toxicity: Please find this information in the listing of the

Specific Target Organ Toxicity
Single exposure
Inhalation: Target Organs: Respiratory system
May cause respiratory irritation.

Repeated exposure
remark: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties
Repeated dose toxicity
no data available

Aspiration hazard
No aspiration toxicity classification

Further information
Other relevant toxicity information: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Acute toxicity
Oral
no data available

Inhalation
no data available

Dermal
LD50 Dermal: > 5010 mg/kg (rabbit)

Irritation
Skin
Result: corrosive effects (rabbit)
Eyes
Result: corrosive effects (rabbit)
Risk of serious damage to eyes.

Sensitisation
Result: not sensitizing (guinea pig) (Maximisation Test)

CMR effects
CMR Properties
Carcinogenicity: Did not show carcinogenic effects in animal experiments.
Mutagenicity: In vitro tests did not show mutagenic effects
Teratogenicity: no data available
Reproductive toxicity: Animal testing did not show any effects on fertility.

Specific Target Organ Toxicity
Single exposure
Inhalation: May cause respiratory irritation.

Repeated exposure
remark: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties
Aspiration hazard
No aspiration toxicity classification

SECTION 12: Ecological information

12.1 Toxicity
Hydrochloric Acid

Acute toxicity
Fish
LC50: 7.45 mg/l (Oncorhynchus mykiss; 96 h)
LC50: 24.6 mg/l (Lepomis macrochirus; 96 h)

Toxicity to daphnia and other aquatic invertebrates
EC50: 0.492 mg/l (Daphnia magna; 48 h)

algae
EC50: 0.78 mg/l (Pseudokirchneriella subcapitata; 72 h)

12.2 Persistence and degradability
Hydrochloric Acid
Biodegradability
Result: Inorganic product which is not removable from water by biological processes.

12.3 Bioaccumulative potential
Hydrochloric Acid
Bioaccumulation is not expected.

12.4 Mobility in soil
Not expected to adsorb on soil.

12.5 Results of PBT and vPvB assessment
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects
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 sewer system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Waste from residues / unused products:
Disposal must be done according to official regulations.

Empty packaging Recommendation:
The waste codes/waste designations below are in accordance with EWC. Waste must be delivered to an approved waste disposal company. The waste is to be kept separate from other types of waste until its disposal. Do not throw waste product into the sewer. Where possible recycling is preferred to disposal or incineration. For handling waste, see measures described in section 7. Empty, uncleaned packaging need the same disposal considerations as filled packaging.
Suitable cleaning agents:
Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADR, RID, ADN, IMO/IMDG, ICAO/IATA
14.1 UN number: 3264

14.2 UN proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s.

14.3 Transport hazard class(es): 8

14.4 Packing group: III

14.5 Environmental hazards:
Environmentally hazardous: No
Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:
ADR
Classification code:
Tunnel restriction code:
Hazard identification number:

IMO/IMDG
EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

Reason for revision:
Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006

Classification procedure
The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Abbreviations and acronyms:

AISE-The international lAssociation for Soaps, Detergents and Maintenance Products
DNEL-Derived No Effect Limit
EUH-CLP Specific hazard statement
PBT-Persistent, Bioaccumulative and Toxic
PNEC-Predicted No Effect Concentration
REACH number-REACH registration number, without supplier specific part
vPvB-very Persistentand very Bioaccumulative
ATE-Acute Toxicity Estimate

End of Safety Data Sheet