Kamco Limited
MATERIAL SAFETY DATA SHEET

SCALEBREAKER HD

Revision date: April 2020

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

1.1. Product identifier

Product name: SCALEBREAKER HD

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

Use of substance / mixture: Descaling liquid

1.3. Details of the supplier of the safety data sheet

Company name: Kamco Ltd
Unit 9, Curo Park
Frogmore
St Albans
Herts
AL2 2DD

Tel: 01727 875020

Email: info@kamco.co.uk

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: C: R34; Xi: R37

Classification under CLP: Met. Corr. 1: H290; Skin Corr. 1B-H314; STOT SE 3: H335

Most important adverse effects: Causes burns. Irritating to respiratory system.

2.2. Label elements

Label elements under CLP:

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

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

GHS07: Exclamation mark

Precautionary statements:
P260: Do not breathe mist / vapours / spray.
P280: Wear protective gloves / protective clothing / eye protection / face protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water / shower.
P304+340: IF HALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+311: If exposed and if you feel unwell: Call a POISON CENTER or doctor.

Label elements under CHIP:

Hazard symbols: Corrosive

Risk phrases:
R34: Causes burns.
R37: Irrating to respiatory system.

Safety phases:
S1/2: Keep locked up and out of reach of children.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

HYDROCHLORIC ACID

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-595-7	-	C: R34; Xi; R37	Skin Corr. 1B: H314; STOT SE 3: H335	30-50%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear unless stuck to skin. Drench the affected skin in running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye in running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. If symptoms develop seek medical attention.

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

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.

Eye contact: There may be severe pain. The eye may water profusely. Corneal burns may occur. Risk of serious damage to eyes.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Causes burns to the gastrointestinal tract. May cause throat burns. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.

Inhalation: Corrosive to the mucous membrane. There may be irritation of the throat with a feeling of tightness in the chest. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be a loss of consciousness. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes of hydrogen chloride / phosgene.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear suitable protective clothing. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Remove all incompatible materials as outlined in section 10 of SDS.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Wear suitable protective clothing. Ensure there is sfficient ventilation of the area. Avoid the formation or spread of mists in the air. Avoid contact with the material and breathing its vapours.

7.2. Conditions for safe storage, including and incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Avoid in Compatible materials and conditions - see section 10 of SDS.

Suitable packaging: Plastic. Plastic-lined. Do not use steel containers. Do not use aluminium containers.

7.3. Specific end use(s)

Specific end uses(s): Descaling chemical.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: **Respirable dust**

State	8 hour TWA:	15min. STEL:	8 hour TWA:	15min. STEL:
UK	1 ppm (2 mg/m3)	5 ppm (8 mgm3)	-	-

8.2. Exposure controls

Protective equipment:

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: Gas / vapour filter, type B: inorganic vapours excl. CO (EN141). Gas / vapour filter, type E: sulphur dioxide and other acid gases (EN141).

Hand protection: Gloves (acid resistant).

Eye protection: Safety goggles. Face shield. Ensure eye bath is to hand.

Skin protection: Protective clothing. Wear full chemical suit. Wear wellingtons. Ensure safety shower is to hand.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pinkish-red through to brownish.

Odour: Irritating odour.

Oxidising: Non-oxidising (by EC criteria)

Solubility in water Miscible in all proportions.

Viscosity: Non-viscous.

Relative density: 1.18g/ml @ 36%

pH <1

9.2. Other information

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials list below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Hot surfaces. Flames.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong bases. Amines.
Finely powdered metals. May react with certain metals to liberate flammable Hydrogen gas.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of hydrogen chloride / phosgene.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
IHL (Aerosol Aqu Sol)	RAT	LC50	45.6 (5min)	mg/l

Relevant effects:

Effect	Route	Basis

Irritation	INH	Hazardous: calculated
Corrosivity	OPT INH DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.

Eye contact: There may be severe pain. The eyes may water profusely. Corneal burns may occur. Risk of serious damage to eyes.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around lips. Causes burns to the gastrointestinal tract. May cause throat burns. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.

Inhalation Corrosive to the mucous membrane. There may be irritation of the throat with the feeling of tightness in the chest. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
ALGAE	72H EC50	0.73	mg/l
Daphnia magna	48H EC50	0.45	mg/l
FISH	(^H LC50	20.5	mg/l

12.2. Persistence and degradability

Persistence and degradability: Components will degrade in water and soil.

12.3. Bioaccumulative potential

Bioaccumulative potential: The product does not bioaccumulate.

12.4. Mobility in soil

Mobility: Non-volatile. Soluble in water. Product is highly mobile in soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Harmful to flora. Large doses causes high / low pH which may affect effluent and sewage treatment processes. discharge of large quantities may kill fish and other aquatic life due to increase / decrease in pH. Do not allow to enter watercourses or soils. Spillage in sewers or waterways must be avoided.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Contaminated containers must not be treated as household waste. Where practical, containers and packaging should be recycled by a licensed contractor.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

UN number: UN1789

UN proper shipping name: HYDROCHLORIC ACID

Transport class: 8

Packing Group: lll

Environmental hazards: No

Special precautions for user:

Special precautions: No special precaution.
Tunnel code : E
Transport category: 2

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information:: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

WARNING : For professional use only.

Phrases used in sections 2 and 3:	H290: May be corrosive to metals. H314: Causes severe skin burns and eye damage. H335: May cause respiratory irration. R34: Causes burns. R37: Irrating to respiratory system.
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