

Product Stone Buster  
 Revision date 1<sup>st</sup> April 2020  
 Revision 1



## Safety Data Sheet (SDS)

### Section 1: Identification of the substance/preparation and of the company/undertaking

#### 1.1 Product identifier

**Product name** Stone Buster  
**Synonyms, Trade names** No information available.

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

**Identified uses** Cleaning agent.  
**Uses advised against** No information available.

#### 1.3 Details of the supplier of the safety data sheet

**Supplier** Emerald Clover Ltd.  
 Drumduffy  
 Drumkeeran  
 Co. Leitrim  
 N41 T998  
 Ireland  
 Tel: 071 96 48008  
 info@emeraldclover.ie

**Contact person**

#### 1.4 Emergency telephone number

**Emergency telephone** Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9. Tel 01 8092566  
**National emergency telephone number** Call 999 or 112.

### Section 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (EC 1272/2008)**  
 Physical and chemical hazards Me. Corr 1 - H290  
 Human health Acute Tox 4 - H332, Skin Corr. 1A - H314, Eye Dam. 1 - H318  
 Environment Not classified

#### 2.2 Label elements

**Contains** HYDROCHLORIC ACID 10 - 30%

**Label in accordance with (EC) no. 1272/2008**



**Signal word** Danger

**Hazard statements**  
 H290 May be corrosive to metals.  
 H314 Causes severe skin burns and eye damage.  
 H332 Harmful if inhaled.

**Precautionary statements**  
**Prevention**  
 P234 Keep only in original container.  
 P260 Do not breathe dust/fume/ gas/mist/vapours/spray.

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

#### Response

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.

### 2.3 Other hazards

None known.

## Section 3: Composition/identification of ingredients

### 3.1 Substance

Not applicable.

### 3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
HYDROCHLORIC ACID 10 - 30%	CAS-No.: 7647-01-0 EC No.: 231-595-7 REACH Reg No.: 01-2119484862-27-XXXX	Acute Tox 3 - H331, Skin Corr. 1A - H314, Me. Corr 1 - H290	10-30%

The full text for all hazard statements are displayed in section 16.

#### Composition comments

The data shown are in accordance with the latest EC Directives.

## Section 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue. NOTE: Effects may be delayed. Keep affected person under observation.

#### Inhalation

Get medical attention. If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. Give artificial respiration if the exposed person is not breathing. If breathing is difficult, oxygen should be administered by qualified personnel.

#### Ingestion

DO NOT induce vomiting. Get medical attention immediately. Thoroughly rinse the mouth with water. Give 1 cup of water to drink every 10 minutes. Never give anything by mouth to an unconscious person.

#### Skin contact

Promptly flush contaminated skin with water, preferably under a shower, removing contaminated clothing while washing proceeds. Continue to rinse for 30 minutes. Do not try to neutralize. Seek medical attention immediately. Continue to rinse.

#### Eye contact

Rinse immediately with plenty of water. Avoid contaminating unaffected eye. Remove contact lenses if present and easy to do so. Continue rinsing with water for at least 15 minutes (lifting the upper and lower eyelids occasionally). Get medical attention immediately. Continue to rinse.

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

#### General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Immediate effects can be expected after short-term exposure.

#### Inhalation

May cause respiratory irritation. There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

#### Ingestion

May cause burns to mucous membranes, throat, esophagus and stomach. May cause stomach pain or vomiting. Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

#### Skin contact

Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

#### Eye contact

Corneal burns may occur. May cause permanent damage.

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

**Notes to the physician**

Treat symptomatically. Risk of permanent damage on contact with eyes. Patients should be checked by an eye specialist. Following significant inhalation, observe for 48 hrs to exclude possibility of delayed lung damage.

**Section 5: Fire-fighting measures****5.1 Extinguishing media****Extinguishing media**

Use extinguishing media appropriate for surrounding fire - Dry chemicals, CO<sub>2</sub>, foam, water-spray.

**Unsuitable extinguishing media**

None noted.

**5.2 Special hazards arising from the substance or mixture****Hazardous combustion products**

The product is not flammable. Hydrochloric acid gas (corrosive) or chlorine gas (toxic) may be formed on heating or in the event of contact with strong oxidants. May cause corrosion damage to metals.

**Unusual fire & explosion hazards**

Harmful vapors may be emitted during a fire. In contact with metals the highly flammable gas hydrogen may be released.

**Specific hazards**

If heated, harmful vapours may be formed. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

**5.3 Advice for firefighters****Special fire fighting procedures**

Use water to cool containers exposed to a fire. Evacuate all personnel, use protective equipment for fire fighting. Use a portable breathing apparatus when the product is involved in a fire. Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location.

**Protective equipment for firefighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Eliminate all sources of ignition.

**For emergency responders**

Do not touch or walk through spilled material. Keep unnecessary and unprotected personnel from entering.

Follow safe handling advice and personal protective equipment recommendations for normal use of product.

**6.2 Environmental precautions****Environmental precautions**

Do not discharge into drains, water courses or onto the ground. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

**6.3 Methods and material for containment and cleaning up****Spill clean up methods**

Wear appropriate personal protective equipment as specified in Section 8. Do not touch or walk through spilled material. Eliminate all ignition sources. Use non-metallic tools/containers for clean up. Ventilate and evacuate the area. Cover drains. Collect mechanically. Absorb spillage with non-combustible, inert absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

**6.4 Reference to other sections****Reference to other sections**

See section 1 for emergency contact. For personal protection, see section 8. For waste disposal, see section 13.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

#### Handling

Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. To dilute, always pour the acid carefully into the water - never water into acid. Do not wear contact lenses. Do not mix with other chemicals.

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

#### Storage precautions

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from incompatible materials (see section 10). Keep away from heat, sparks, direct sunlight and open flames. Do not store above eye height. Take precautionary measures against static discharges.

#### Storage class

Corrosive storage.

### 7.3 Specific end use(s)

#### Specific end use(s)

The identified uses are in section 1 of this Safety Data Sheet.

#### Usage description

Use only according to directions.

## Section 8: Exposure controls/Personal protection

### 8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
HYDROCHLORIC ACID 10 - 30%	OEL	5 ppm	8 mg/m <sup>3</sup>	10 ppm	15 mg/m <sup>3</sup>	
HYDROCHLORIC ACID 10 - 30%	WEL	1 ppm	2 mg/m <sup>3</sup>	5 ppm	8 mg/m <sup>3</sup>	(gas and aerosol mists).

#### Ingredient comments

Occupational Exposure Limits, Ireland 2016.  
EH40 WEL - Workplace Exposure Limits UK.

### 8.2 Exposure Controls

#### Protective equipment



#### Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

#### Respiratory equipment

Where risk assessment shows air-purifying respirators are appropriate use a full face respirator conforming to EN143, and suitable respirator cartridges as a backup to engineering controls. Suggested filter type: E/P2. ABEK (EN 14387).

Use respirators and components tested and approved under appropriate government standards such as CEN (EU).

#### Hand protection

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace.

Gloves must be inspected prior to use. Suggested material: Nitrile rubber. Layer thickness: 0.11 mm. Breakthrough time: >480 minutes. Consult manufacturer for specific advice.

Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws.

#### Eye protection

Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).

#### Other protection

Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. The selected clothing must satisfy the European norm standard EN 943.

<b>Hygiene measures</b>	Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety practice. Wash promptly if skin becomes wet or contaminated. Wash hands after use.
<b>Process conditions</b>	Ensure that eye flushing systems and safety showers are located close by in the work place.

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## Section 9: Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless to pale yellow.
<b>Odour</b>	Pungent.
<b>Odour threshold - lower</b>	No information available.
<b>Odour threshold - upper</b>	No information available.
<b>pH-Value, Conc. Solution</b>	1.00
<b>pH-Value, Diluted solution</b>	No information available.
<b>Melting point</b>	No information available.
<b>Initial boiling point and boiling range</b>	No information available.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	No information available.
<b>Flammability state</b>	No information available.
<b>Flammability limit - lower(%)</b>	No information available.
<b>Flammability limit - upper(%)</b>	No information available.
<b>Vapour pressure</b>	No information available.
<b>Vapour density (air=1)</b>	No information available.
<b>Relative density</b>	No information available.
<b>Bulk density</b>	No information available.
<b>Solubility</b>	Soluble in water.
<b>Decomposition temperature</b>	No information available.
<b>Partition coefficient; n-Octanol/Water</b>	No information available.
<b>Auto ignition temperature (°C)</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	Not classified as explosive.
<b>Oxidising properties</b>	No information available.

### 9.2 Other information

<b>Molecular weight</b>	No information available.
<b>Volatile organic compound</b>	No information available.
<b>Other information</b>	None noted.

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**Section 10: Stability and reactivity**


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**10.1 Reactivity**

<b>Reactivity</b>	Reacts with alkaline substances and water.
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**10.2 Chemical stability**

<b>Stability</b>	Stable under recommended storage and handling conditions.
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**10.3 Possibility of hazardous reactions**

<b>Hazardous reactions</b>	Reacts violently with alkalies and oxidizing agents by formation of gaseous compounds (Chlorine, Hydrogen). Highly flammable hydrogen gas by contact with metals. Do not add water directly to the product. It may cause a violent reaction.
<b>Hazardous polymerisation</b>	Will not polymerise.
<b>Polymerisation description</b>	No information.

**10.4 Conditions to Avoid**

<b>Conditions to avoid</b>	Protect from moisture, open flames and heat.
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**10.5 Incompatible materials**

<b>Materials to avoid</b>	Reacts with bases. The reaction may be violent with strong heat generation. Metals. Bases. Amines. Alkali metals. Permanganates. Fluorine. Metal acetylides. Hexalithium disilicide.
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**10.6 Hazardous decomposition products**

<b>Hazardous decomposition products</b>	Hydrogen chloride gas. Chlorine gas.
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**Section 11: Toxicological information**


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**11.1 Information on toxicological effects**

<b>Toxicological information</b>	No toxicological information for the overall finished product.
<b>Acute toxicity (Oral LD50)</b>	No information available.
<b>Acute toxicity (Dermal LD50)</b>	No information available.
<b>Acute toxicity (Inhalation LD50)</b>	No information available.
<b>Serious eye damage/irritation</b>	Causes severe eye damage.
<b>Skin corrosion/irritation</b>	No information available.
<b>Respiratory sensitisation</b>	No information available.
<b>Skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Specific target organ toxicity - Single exposure:</b>	
<b>STOT - Single exposure</b>	No information available.
<b>Specific target organ toxicity - Repeated exposure:</b>	
<b>STOT - Repeated exposure</b>	No information available.
<b>Inhalation</b>	May cause respiratory irritation. There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
<b>Ingestion</b>	May cause burns to mucous membranes, throat, esophagus and stomach. May cause stomach pain or vomiting. Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
<b>Skin contact</b>	Blistering may occur. Progressive ulceration will occur if treatment is not immediate.
<b>Eye contact</b>	Corneal burns may occur. May cause permanent damage.
<b>Waste management</b>	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
<b>Routes of entry</b>	No information available.
<b>Target organs</b>	Eyes, skin, digestive system, respiratory system.

Aspiration hazards:	No information available.
Reproductive toxicity:	No information available.

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## Section 12: Ecological information

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### 12.1 Toxicity

Acute toxicity - Fish	No information available.
Acute toxicity - Aquatic invertebrates	No information available.
Acute toxicity - Aquatic plants	No information available.
Acute toxicity - Microorganisms	No information available.
Chronic toxicity - Fish	No information available.
Chronic toxicity - Aquatic invertebrates	No information available.
Chronic toxicity - Aquatic plants	No information available.
Chronic toxicity - Microorganisms	No information available.
Ecotoxicity	No ecological information available for the finished product.
Eco toxicological information	The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

### 12.2 Persistence and degradability

Degradability	No information available.
Biological oxygen demand	No information available.
Chemical oxygen demand	No information available.

### 12.3 Bioaccumulative potential

Bioaccumulative potential	No bioaccumulation potential.
Bioaccumulation factor	No information available.
Partition coefficient; n-Octanol/Water	No information available.

### 12.4 Mobility in soil

Mobility	The product is soluble in water. Readily absorbed into soil.
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### 12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Product is not identified as PBT or vPvB.
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### 12.6 Other adverse effects

Other adverse effects	None known.
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## Section 13: Disposal considerations

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Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
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### 13.1 Waste treatment methods

Disposal methods	Dispose of waste and residues in accordance with local authority requirements. For waste disposal, use a licensed industrial waste disposal agent.
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## Section 14: Transport information

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### 14.1 UN number

UN no. (ADR)	UN1789
UN no. (IMDG)	UN1789
UN no. (IATA)	UN1789

**14.2 UN proper shipping name**

ADR proper shipping name	HYDROCHLORIC ACID
IMDG proper shipping name	HYDROCHLORIC ACID
IATA proper shipping name	HYDROCHLORIC ACID

**14.3 Transport hazard class(es)**

ADR class	8
IMDG class	8
IATA class	8

Transport labels

**14.4 Packing group**

ADR/RID/ADN packing group	II
IMDG packing group	II
IATA packing group	II

**14.5 Environmental hazards**

ADR	No
IMDG	No
IATA	No

**14.6 Special precautions for user**

EMS	F-A, S-B
Emergency action code	A3 A803
Hazard no. (ADR)	80
Tunnel restriction code	(E)

**14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code**

Not applicable.

**Section 15: Regulatory information****15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture**

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
Approved code of practice	2016 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).  Workplace Exposure Limits Guidance Note EH40/2005.
Chemical safety assessment	No chemical safety assessment has been carried out.

**Section 16: Other information**

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.
Revision comments	This is first issue.
Revision date	1 <sup>st</sup> April 2020
Revision	1
Safety data sheet status	Approved.

**Hazard statements in full**



<b>H290</b>	May be corrosive to metals.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H331</b>	Toxic if inhaled.
<b>H332</b>	Harmful if inhaled.

**Disclaimer**

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 the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.