

Product Drain 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** Drain Buster  
**Synonyms, Trade names** No information available.

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

**Identified uses** No specific uses identified.  
**Uses advised against** No uses advised against are identified.

#### 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

### 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 Skin Corr. 1A - H314, Eye Dam. 1 - H318  
 Environment Not classified

#### 2.2 Label elements

**Contains** sodium hydroxide

**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.

**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**  
 P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.  
P390 Absorb spillage to prevent material damage.

### 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	%
sodium hydroxide	CAS-No.: 1310-73-2 EC No.: 215-185-5 REACH Reg No.: 01-2119457892-27-XXXX	Skin Corr. 1A - H314, Eye Dam. 1 - H318, Me. Corr 1 - H290	30-60%

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.

#### Inhalation

If this product is Inhaled, move the exposed person to fresh air promptly. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

#### Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Give plenty of water or other fluids to drink. Do not induce vomiting. Obtain medical attention urgently. If vomiting occurs spontaneously, keep head low and/or keep airway clear.

#### Skin contact

Immediately wash with water, preferably under a shower, removing contaminated clothing while washing proceeds. Obtain medical attention if irritation persists or if blistering occurs. Contaminated clothing should be washed before re-use.

#### Eye contact

Do not rub eye. If a contact lens is present, DO NOT delay flushing to attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse for thirty minutes holding the eye open if necessary. Do not rub eye. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. If irritation persists, seek medical attention immediately.

### 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.

#### Inhalation

There may be shortness of breath with a burning sensation in the throat.

#### Ingestion

Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns.

#### Skin contact

Corrosive! Can cause redness, pain, and severe skin burns.

#### Eye contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes serious eye damage.

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

#### Notes to the physician

Treat symptomatically.

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## Section 5: Fire-fighting measures

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### 5.1 Extinguishing media

Extinguishing media	Foam, extinguishing powder, in cases of larger fires, water spray should be used.
Unsuitable extinguishing media	High volume water jet.

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

Hazardous combustion products	During fire, toxic gases (CO, CO <sub>2</sub> ) are formed.
Unusual fire & explosion hazards	No unusual fire or explosion hazards noted.
Specific hazards	If heated, corrosive vapours may be formed.

### 5.3 Advice for firefighters

Special fire fighting procedures	Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Do not scatter spilled material with more water than needed to fight the fire
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.

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## Section 6: Accidental release measures

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

Personal precautions	Read and follow manufacturer's recommendations. Do not touch or walk through spilled material. Avoid inhalation of vapours and contact with skin and eyes. In case of inadequate ventilation, use respiratory protection. Evacuate and ventilate area. Only trained and properly protected personnel must be involved in clean-up operations. For personal protection, see section 8.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

### 6.2 Environmental precautions

Environmental precautions	Discharge into the environment must be avoided due to pH shift. If spillage or contaminated washings cause contamination of water courses, drains or vegetation, inform local authority/relevant authorities.
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### 6.3 Methods and material for containment and cleaning up

Spill clean up methods	DO NOT touch spilled material! Stop leak if possible without risk. Small spillages: Dilute carefully with water. For larger scale spills: Absorb in vermiculite, dry sand or earth and place into containers. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Flush the area with water.
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### 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.
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## Section 7: Handling and storage

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### 7.1 Precautions for safe handling

Handling	Do not mix with other chemicals. Keep container tightly closed. Provide good ventilation. Eliminate all sources of ignition. Use proper personal protection when handling (refer to Section 8).
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### 7.2 Conditions for safe storage, including any incompatibilities

Storage precautions	Store in sealed original container. Store in a cool, dry place. Keep container in a well ventilated place.
Storage class	Corrosive storage.

### 7.3 Specific end use(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
<b>Usage description</b>	Use only according to directions.

## Section 8: Exposure controls/Personal protection

### 8.1 Control parameters

Component	STD	TWA (8 Hrs)	STEL (15mins)	Notes
sodium hydroxide	OEL		2 mg/m <sup>3</sup>	

**Ingredient comments** Ireland, Occupational Exposure Limits 2016.

### 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 properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: self-contained breathing apparatus (SCBA), use a full-face air supplied respirator with type ABEK (EN 14387) cartridges as a backup to engineering controls. Recommended filter type: P2. Refer to manufacturer for specific advice.

#### Hand protection

Gloves must be inspected prior to use. 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 and good laboratory practices. Wear chemical protective gloves that are in accordance with EN 374.

#### Eye protection

Wear safety goggles/face shield in accordance with EN166. Eye protection equipment should be tested and approved according to regulations applicable, like EN 166 (EU).

#### Other protection

Complete suit protecting against chemicals, protective clothing, PVC or rubber footwear. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance applicable to the workplace. Select appropriate protective clothing based on chemical resistance data and an assessment of local exposure potential. Personal protective equipment for the body 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.

#### Hygiene measures

Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Take off immediately all contaminated clothing. Avoid contact with skin, eyes and clothing.

#### Process conditions

Keep container tightly sealed when not in use. Ensure that eye flushing systems and safety showers are located close by in the work place.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.
<b>Odour threshold - lower</b>	No information available.
<b>Odour threshold - upper</b>	No information available.
<b>pH-Value, Conc. Solution</b>	ca. 14 ( 20 °C)

<b>pH-Value, Diluted solution</b>	No information available.
<b>Melting point</b>	-17 °C 10% solution 12 °C 50% solution
<b>Initial boiling point and boiling range</b>	105 °C 10% solution 145 °C 50% solution
<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>	21 hPa (20 °C) 12% solution
<b>Vapour density (air=1)</b>	No information available.
<b>Relative density</b>	ca. 1.0538 g/cm <sup>3</sup> (20 °C) 5% solution ca. 1.175 g/cm <sup>3</sup> (20 °C) 15% solution ca. 1.274 g/cm <sup>3</sup> (20 °C) 25% solution ca. 1.34 g/cm <sup>3</sup> (20 °C) 30% solution ca. 1.38 g/cm <sup>3</sup> (20 °C) 35% solution ca. 1.48 g/cm <sup>3</sup> (20 °C) 45% solution ca. 1.525 g/cm <sup>3</sup> (20 °C) 50% solution ca. 1.2191 g/cm <sup>3</sup> (20 °C) 20% solution
<b>Bulk density</b>	No information available.
<b>Solubility</b>	Water solubility:1090 g/l (20 °C)
<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>	79 mPa.s (20 °C)
<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.

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## Section 10: Stability and reactivity

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### 10.1 Reactivity

<b>Reactivity</b>	No specific reactivity hazards associated with this product.
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### 10.2 Chemical stability

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

<b>Hazardous reactions</b>	For information on hazardous reactions see section 10.1. Corrosive in contact with metals. Attacks metals liberating flammable Hydrogen gas. Exothermic reaction with: Acids.
<b>Hazardous polymerisation</b>	Unknown.
<b>Polymerisation description</b>	Unknown.

**10.4 Conditions to Avoid**

**Conditions to avoid** Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

**Materials to avoid** Acids, Light metals, Alcohols, Halogenated hydrocarbon.

**10.6 Hazardous decomposition products**

**Hazardous decomposition products** Hydrogen.

**Section 11: Toxicological information****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 skin burns and 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>	There may be shortness of breath with a burning sensation in the throat.
<b>Ingestion</b>	Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns.
<b>Skin contact</b>	Corrosive! Can cause redness, pain, and severe skin burns.
<b>Eye contact</b>	Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes serious eye 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 and skin.
<b>Aspiration hazards:</b>	No information available.
<b>Reproductive toxicity:</b>	No information available.

**Section 12: Ecological information****12.1 Toxicity**

<b>Acute toxicity - Fish</b>	LC50 125 mg/l (Gambusia affinis; 96 h) (No guideline followed) LC50 145 mg/l (Poecilia reticulata; 24 h) (No guideline followed)
<b>Acute toxicity - Aquatic invertebrates</b>	EC50: 40.4 mg/l (Ceriodaphnia (water flea); 48 h) (No guideline followed)
<b>Acute toxicity - Aquatic plants</b>	
<b>Acute toxicity - Microorganisms</b>	EC50:22 mg/l (Photobacterium phosphoreum; 15 min) (EPS 1/RM/24)
<b>Chronic toxicity - Fish</b>	No information available.
<b>Chronic toxicity - Aquatic invertebrates</b>	No information available.
<b>Chronic toxicity - Aquatic plants</b>	No information available.
<b>Chronic toxicity - Microorganisms</b>	No information available.

<b>Ecotoxicity</b>	No Ecological information on the finished product.
<b>Eco toxicological information</b>	Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

**12.2 Persistence and degradability**

<b>Degradability</b>	The methods for determining biodegradability are not applicable to inorganic substances.
<b>Biological oxygen demand</b>	No information available.
<b>Chemical oxygen demand</b>	No information available.

**12.3 Bioaccumulative potential**

<b>Bioaccumulative potential</b>	Does not bioaccumulate.
<b>Bioaccumulation factor</b>	No information available.
<b>Partition coefficient; n-Octanol/Water</b>	No information available.

**12.4 Mobility in soil**

<b>Mobility</b>	Mobile in water environment.
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**12.5 Results of PBT and vPvB assessment**

<b>Results of PBT and vPvB assessment</b>	Substance does not meet the screening criteria for persistency nor bioaccumulation so is neither PBT nor vPvB.
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**12.6 Other adverse effects**

<b>Other adverse effects</b>	No information available.
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**Section 13: Disposal considerations**

<b>Waste management</b>	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**

<b>Disposal methods</b>	Dispose of waste and residues in accordance with local authority requirements. Dispose of sodium hydroxide solutions or materials contaminated with sodium hydroxide using a licensed waste disposal firm.
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**Section 14: Transport information****14.1 UN number**

<b>UN no. (ADR)</b>	UN1824
<b>UN no. (IMDG)</b>	UN1824
<b>UN no. (IATA)</b>	UN1824

**14.2 UN proper shipping name**

<b>ADR proper shipping name</b>	SODIUM HYDROXIDE SOLUTION
<b>IMDG proper shipping name</b>	SODIUM HYDROXIDE SOLUTION
<b>IATA proper shipping name</b>	SODIUM HYDROXIDE SOLUTION

**14.3 Transport hazard class(es)**

<b>ADR class</b>	8
<b>IMDG class</b>	8
<b>IATA class</b>	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**

<b>EU legislation</b>	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.
<b>Approved code of practice</b>	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).
<b>Chemical safety assessment</b>	No chemical safety assessment has been carried out.

**Section 16: Other information**

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

**Hazard statements in full**

<b>H290</b>	May be corrosive to metals.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.

**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.