

# SAFETY DATA SHEET

## ECO Descaler

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

- |     |                                                                               |                                                                                                                                                                                                                                                                         |
|-----|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 | Product identifier                                                            | Scalemaster ECO Descaler 250ml.                                                                                                                                                                                                                                         |
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against | Descaler for kettles, showers etc.                                                                                                                                                                                                                                      |
| 1.3 | Details of the supplier of the safety data sheet                              | Scalemaster Limited<br>Emerald Way<br>Stone Business Park<br>STONE<br>Staffordshire ST15 0SR<br>Tel: 01785 811636<br>Email: <a href="mailto:info@scalemaster.co.uk">info@scalemaster.co.uk</a><br>Web: <a href="http://www.scalemaster.co.uk">www.scalemaster.co.uk</a> |
| 1.4 | Emergency telephone number                                                    | Tel: 01785 811636.<br>Only available during office hours.                                                                                                                                                                                                               |

### SECTION 2: Hazards identification

- |     |                                                                    |                                                                                                         |
|-----|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 2.1 | Classification of the substance or mixture                         |                                                                                                         |
|     | Classification according to regulation (EC) No 1272/2008 (CLP)     | Skin Corr. 1A: H314.                                                                                    |
|     | Additional information                                             | Most important adverse effects: Causes severe skin burns and eye damage.                                |
| 2.2 | Label elements                                                     |                                                                                                         |
|     | According to regulation (EC) No 1272/2008 (CLP) & (EU) No 453/2010 |                                                                                                         |
|     | Hazard pictograms                                                  | GHS05: Corrosion<br> |
|     | Signal words                                                       | Danger                                                                                                  |
|     | Hazard statements                                                  | H314: Causes severe skin burns and eye damage.                                                          |

## Precautionary statements

P260: Do not breathe dust/fumes/gas/mist/vapours/spray.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340: IF INHALED: Remove person 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.

## 2.3 Other hazards

This product is not identified as a PBT/vPvB substance.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

### 3.2 Mixtures

| EINECS      | CAS     | PBT/WEL | (EC) No 1272/2008 classification | Percent |
|-------------|---------|---------|----------------------------------|---------|
| FORMIC ACID |         |         |                                  |         |
| 200-579-1   | 64-18-6 | -       | Skin Corr. 1A: H314              | 30-50%  |

## Additional information

For full text of each hazard statement see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

#### Following inhalation

Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

#### Following skin contact

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

#### Following eye contact

Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

#### Following ingestion

Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water to drink immediately. 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.

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

|                           |                                                                                                                                                                                                                                                                                                                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Following inhalation      | 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 loss of consciousness. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum. |
| Following 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.                                                                                                                                                      |
| Following eye contact     | There may be irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur. May cause permanent damage.                                                                                                                                                                              |
| Following ingestion       | There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.                                                                                                     |
| Delayed/immediate effects | Immediate effects can be expected after short-term exposure.                                                                                                                                                                                                                                                                   |

**4.3 Identification of any immediate medical attention and special treatment needed**

Immediate medical attention is required.

**SECTION 5: Firefighting measures**

|                                                           |                                                                                                          |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 5.1 Extinguishing media                                   | Suitable extinguishing media for the surrounding fire should be used.                                    |
| 5.2 Special hazards arising from the substance or mixture | Corrosive. In combustion emits toxic fumes of carbon dioxide / carbon monoxide.                          |
| 5.3 Advice for firefighters                               | 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 | Do not attempt to take action without suitable protective clothing - see section 8 of the SDS. Remove all incompatible materials as outlined in Section 10 of SDS.           |
| 6.2 Environmental precautions                                           | Do not discharge into drains or rivers. Contain the spillage using bunding.                                                                                                  |
| 6.3 Methods and material for containment and cleaning up                | Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage area with large amounts of water. |
| 6.4 Reference to other sections                                         | Refer to section 8 of SDS.                                                                                                                                                   |

**SECTION 7: Handling and storage**

|                                                                  |                                                                                                                                                 |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1 Precautions for safe handling                                | Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air. Avoid direct contact with the substance. |
| 7.2 Conditions for safe storage, including any incompatibilities | Store in a cool, well ventilated area. Keep container tightly closed.                                                                           |
| Suitable packaging                                               | Plastic.                                                                                                                                        |
| 7.3 Specific end use(s)                                          | No specific requirement.                                                                                                                        |

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Work place exposure limits

FORMIC ACID...100%

| Workplace exposure limits |                       |              | Respirable dust |             |
|---------------------------|-----------------------|--------------|-----------------|-------------|
| State                     | 8 hour TWA            | 15 min. STEL | 8 hour TWA      | 15 min STEL |
| UK                        | 9.6 mg/m <sup>3</sup> | -            | -               | -           |

DNEL/PNEC

No data available.

### 8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures such as personal protective equipment

Respiratory protection

Gas/vapour filter, type A: organic vapours (EN141). Gas/vapour filter, type E: sulfur dioxide and other gases (EN141).

Hand protection

Gloves (acid resistant).

Eye protection

Safety goggles. Face-shield. Ensure eye bath is to hand.

Skin protection

Acid resistant protective clothing. Boots. Ensure safety shower is to hand.

Environmental

Ensure all engineering measures mentioned in Section 7 of SDS are in place.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                        |             |
|------------------------|-------------|
| State                  | Liquid.     |
| Colour                 | Colourless. |
| Odour                  | Pungent.    |
| Boiling point/range °C | 106         |
| Flash point °C         | 65          |
| pH                     | <1          |
| Relative density       | 1.16 - 1.24 |

### 9.2 Other information

No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended transport or storage conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4 Conditions to avoid

Heat.

### 10.5 Incompatible materials

Strong bases. Strong oxidising agents. Amines. Finely powdered metals. Acid anhydrides.

### 10.6 Hazardous decomposition products

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Hazardous ingredients

FORMIC ACID...100%

|     |     |      |      |       |
|-----|-----|------|------|-------|
| IVN | MUS | LD50 | 145  | mg/kg |
| ORL | MUS | LD50 | 700  | mg/kg |
| ORL | RAT | LD50 | 1100 | mg/kg |

#### Relevant hazards for substance:

| Hazard                        | Route | Basis                 |
|-------------------------------|-------|-----------------------|
| Skin corrosion/irritation     | DRM   | Hazardous: calculated |
| Serious eye damage/irritation | OPT   | Hazardous: calculated |

#### Symptoms/routes of exposure

##### Ingestion (swallowing)

There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.

##### Inhalation

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 loss of consciousness. Prolonged or repeated exposure may cause ulceration and perforation of the nasal septum.

##### 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 irritation and redness. There may be severe pain. The eyes may water profusely. Corneal burns may occur. May cause permanent damage.

##### Delayed/immediate effects

Immediate effects can be expected after short-term exposure.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Ecotoxicity values

No data available.

### 12.2 Persistence and degradability

Biodegradable.

### 12.3 Bioaccumulative potential

No bioaccumulation potential.

### 12.4 Mobility in soil

Readily absorbed into soil. Soluble in water. Non-volatile.

### 12.5 Results of PBT and vPvB assessment

This product is not identified as a PBT/vPvB substance.

### 12.6 Other adverse effects

Harmful to aquatic organisms. Very toxic to fauna.

**SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods

|                       |                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------|
| Disposal operations   | Transfer to a suitable container and arrange for collection by specialised disposal company. |
| Recovery operations   | Not applicable.                                                                              |
| Disposal of packaging | Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.       |

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

**SECTION 14: Transport information**

## 14.1 UN number

|           |        |
|-----------|--------|
| UN number | UN3412 |
|-----------|--------|

## 14.2 UN proper shipping name

|               |             |
|---------------|-------------|
| Shipping name | FORMIC ACID |
|---------------|-------------|

## 14.3 Transport hazard class(es)

|                 |   |
|-----------------|---|
| Transport class | 8 |
|-----------------|---|

## 14.4 Packing group

|               |    |
|---------------|----|
| Packing group | II |
|---------------|----|

## 14.5 Environmental hazards

|                           |    |
|---------------------------|----|
| Environmentally hazardous | No |
| Marine pollutant          | No |

## 14.6 Special precautions for user

|                    |   |
|--------------------|---|
| 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

## SECTION 16: Other information

Indication of changes

\* Indicates text in the SDS which has changed since the last revision.

Abbreviations and acronyms

|             |                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------|
| ACLG        | Approved Classification and Labelling Guide                                                        |
| CAS No      | Chemical Abstracts Service Number                                                                  |
| CLP         | Classification, Labelling and Packaging Regulations (EC) 1272/2008                                 |
| DNEC        | Derived No Effect Level                                                                            |
| EC No       | EINECS number                                                                                      |
| EC50        | Concentration that causes 50% of maximum effect in stated time period                              |
| EINECS      | European Inventory of Existing Commercial Substances                                               |
| LD50 (LC50) | Lethal dose (or concentration) at which 50% of the population will be killed in stated time period |
| LDLo        | Lowest detected lethal dose                                                                        |
| LTEL        | Long Term Exposure Limit                                                                           |
| PBT         | Persistent, Bioaccumulative and Toxic Substances                                                   |
| PNEC        | Predicted No Effect Level                                                                          |
| REACH       | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations                   |
| SDS         | Safety Data Sheet                                                                                  |
| STEL        | Short Term Exposure Limit                                                                          |
| SVHC        | Substances of Very High Concern                                                                    |
| TWA         | Time Weighted Average                                                                              |
| UN          | United Nations                                                                                     |
| vPvB        | Very Persistent and Very Bioaccumulative                                                           |
| WEL         | Workplace Exposure Limits                                                                          |

Literature references and sources of data

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

Full text of hazard statements listed in Sections 2 & 3.

Hazard statements in full

|      |                                         |
|------|-----------------------------------------|
| H314 | Causes severe skin burns and eye damage |
|------|-----------------------------------------|

This information is based on the present state of our knowledge.

Legal disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.