

# SAFETY DATA SHEET

## CalDescaler



This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008.

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

#### 1.1 Product identifier

CalDescaler

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

Descaling of central heating systems

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

Calmag (Yorkshire) Ltd  
Riverview Buildings  
Bradford Road, Riddlesden  
Keighley  
West Yorkshire  
BD20 5LN  
Tel: 01535 210320  
Fax: 01535 210321  
Email: [sales@calmagltd.com](mailto:sales@calmagltd.com)  
Web: [www.calmagltd.com](http://www.calmagltd.com)

#### 1.4 Emergency telephone number

Tel: 01535 210320 (9.00am - 5.00pm Mon-Fri except Public Holidays)

### SECTION 2: Hazards Identification

#### 2.1 Classification of the substance or mixture

Skin Corrosion 1B H314 Causes severe skin burns and eye damage

#### 2.2 Label elements



#### Danger

H314 Causes severe skin burns and eye damage

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

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

**2.3 Other hazards**

None known.

**SECTION 3: Composition****3.1 Substances**

Not applicable

**3.2 Mixtures**

An aqueous mixture of phosphoric acid and citric acid monohydrate

Name	CAS No	Concentration	Classification
Phosphoric acid	7664-38-2	25-30%	Met Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314
Citric acid monohydrate	5949-29-1	10-15%	Eye Irrit.2 H319

See section 16 for full description of statements.

**SECTION 4: First Aid Measures****4.1 Description of first aid measures**

EYE CONTACT: Wash thoroughly with water for at least 10 minutes, holding the eyelids apart. Seek immediate medical attention.

INHALATION: Remove from exposure. If breathing becomes difficult call a doctor.

SKIN CONTACT: Wash off with soap and water. Seek medical attention if irritation persists..

INGESTION: If swallowed, rinse mouth with water. Do NOT induce vomiting. Seek medical attention.

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

EYES: Redness, burns, pain.

INHALATION: Cough, irritation.

SKIN: Redness, Redness, irritation, pain.

INGESTION: Nausea, pain, vomiting.

**4.3 Indication of any immediate medical attention and special treatments needed**

Immediate first aid is essential. Symptomatic treatment as required for acid burns.

**SECTION 5: Firefighting Measures****5.1 Extinguishing media**

Not flammable. Use extinguisher appropriate to surrounding conditions.

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

If involved in a fire, may release fumes of phosphorous oxides.

**5.3 Advice for fire fighters**

Fire fighters should wear protective clothing and breathing apparatus as appropriate.

**SECTION 6: Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing including gloves and eye protection. Open doors and windows to ensure good ventilation.

**6.2 Environmental precautions**

Prevent entry into sewers and watercourses.

**6.3 Methods and materials for containment and clearing up**

Small spills (<1 litre) may be washed to drain with copious quantities of water.

Large spills (> 1 litre) should be covered with a suitable absorbent, e.g. sand, earth or spill granules and collected for disposal. Wash spill area thoroughly with water and detergent.

**6.4 References to other sections**

See section 8 and 13 for further advice.

**SECTION 7: Handling and Storage****7.1 Precautions for safe handling**

Other than the use of skin, hand and eye protection, no special precautions are required.

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

Keep containers tightly closed. Store above 5°C.

**7.3 Specific end uses(s)**

No special precautions.

**SECTION 8. Exposure Controls/Personal Protection****8.1 Control parameters**

Substance	8 hour exposure limit	15 minute exposure limit	Source, Type
Phosphoric acid	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	EH40, 2011

**8.2 Exposure controls**

None required during normal handling. Normal chemical handling procedures should be observed. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling,

**Respiratory protection**

Not usually required. Use in well ventilated areas and avoid formation of spray or aerosols.

**Hand Protection**

Suitable chemical resistant gloves recommended for use with acid materials. PVC or nitrile may be suitable but glove manufacturer recommendations should always be checked. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

**Eye protection**

Goggles must be worn when handling this product.

**Skin protection**

Coveralls recommended. These should be changed after use or if contaminated. Wash before re-use.

**SECTION 9: Physical and Chemical Properties****9.1 Information on basic physical and chemical properties**

<b>Appearance:</b>	Clear liquid
<b>Odour:</b>	Odourless
<b>Odour threshold:</b>	Not applicable
<b>pH:</b>	Acidic
<b>Melting point:</b>	Similar to water – approx. 0°C
<b>Boiling point:</b>	Similar to water – approx. 100°C
<b>Flashpoint:</b>	None
<b>Evaporation rate:</b>	Similar to water
<b>Flammability (solids/gases):</b>	Not applicable
<b>Upper/lower flammability limits:</b>	Not applicable
<b>Vapour pressure:</b>	Similar to water

<b>Vapour density</b>	Similar to water
<b>Relative density</b>	1.20
<b>Solubility in water:</b>	Completely soluble
<b>Solubility in other solvents:</b>	No data
<b>Partition coefficient (log Kow)</b>	No data
<b>Autoignition temperature</b>	Not combustible
<b>Decomposition temperature</b>	No data
<b>Viscosity</b>	Not viscous
<b>Explosive properties</b>	Not classified as explosive
<b>Oxidising properties</b>	Not classified as oxidising.

## 9.2 Other information

None

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

Powerflush descaler is not considered to be reactive.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

May react vigorously with alkalis and oxidising agents.

### 10.4 Conditions to avoid

Excessive heat.

### 10.5 Incompatible materials

Alkalis, oxidising agents

### 10.6 Hazardous decomposition products

May release phosphorous oxides if heated to decomposition.

## SECTION 11: Toxicological Information

### 11.1 Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

- (a) **acute toxicity** Ingestion will result in acid burns to the mouth, throat and digestive system..
- (b) **skin corrosion/irritation** Will cause skin burns based on consideration of its components.
- (c) **serious eye damage/irritation** Will cause burns to the eye based on consideration of its components, which may result in permanent eye damage.
- (d) **respiratory/skin sensitisation** Contains no components known to be sensitising.
- (e) **germ cell mutagenicity** Contains no components known to be germ cell mutagens.
- (f) **carcinogenicity** Contains no components known to be carcinogens.
- (g) **reproductive toxicity** Contains no components known to be reproductive toxins.
- (h) **STOT-single exposure** Contains no components known to cause specific target organ toxicity.
- (i) **STOT-repeated exposure** Contains no components known to cause specific target organ toxicity.
- (j) **aspiration hazard** The product is not expected to be an aspiration hazard.

## SECTION 12: Ecological Information

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

### 12.1 Toxicity

Not expected to be toxic in the environment. Significant releases may cause short term effects due to the pH of the product, however this will be rapidly lost upon dilution.

#### 12.2 Persistence and degradability

The organic components are biodegradable and are not expected to persist in the environment.

#### 12.3 Bioaccumulative potential

None of the components are considered to be bioaccumulative.

#### 12.4 Mobility in soil

All components are readily soluble in water.

#### 12.5 Results of PBT and vPvB assessment

None of the components are known to be PBT or vPvB.

#### 12.6 Other adverse effects

None known.

### SECTION 13: Disposal Considerations

#### 13.1 Waste treatment methods

Recover and recycle product if possible. If recovery and recycling are not possible incinerate or dispose of in accordance with local regulations.

### SECTION 14: Transport Information

14.1	UN Number	1805	
14.2	UN Proper shipping name	Phosphoric acid mixture	
14.3	Transport hazard class(es)	8	
14.4	Packing group	III	
14.5	Environmental hazards	None	
14.6	Special precautions for user	None	
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not transported in bulk	

### SECTION 15: Regulatory Information

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

All components are listed as existing substances in Europe

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

### SECTION 16: Other Information

Skin Corr. 1B H314 Causes severe skin burns and eye damage.  
Eye Irrit.2 H319 Causes serious eye irritation.

**Revision information:** Updated to remove DSD and DPD classification and labelling information.  
Component ingredient classifications in section 3.2 updated.