SAFETY DATA SHEET

CalCleanser

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
CalCleanser

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Cleanser for central heating systems
Uses advised against: None identified

1.3 Details of the supplier of the safety data sheet
Calmag (Yorkshire) Ltd
Riverview Buildings
Bradford Road, Riddlesden
Keighley
West Yorkshire
BD20 5JH
Tel: 01535 210320
Fax: 01535 210321
Email: sales@calmagltd.com
Web: 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

Not classified as hazardous

2.2 Label elements

No label required.

2.3 Other hazards
None known. None of the components are known to be PBT, vPvB, or to have endocrine disrupting properties.

SECTION 3: Composition

3.1 Substances
Not applicable

3.2 Mixtures

Name	CAS No	Concentration	Classification
glutamic acid, N,N-diacetic acid, tetrasodium salt	(CAS-No.) 51981-21-6 (EC-No.) 257-573-7 (REACH-no) 01-2119493601-38-XXXX	1 – 3	Not classified
sodium carbonate	(CAS-No.) 497-19-8 (EC-No.) 207-838-8 (EC Index-No.) 011-005-00-2 (REACH-no) 01-2119485498-19-XXXX	0.5 – 1	Eye Irrit. 2, H319
sodium nitrite	(CAS-No.) 7632-00-0 (EC-No.) 231-555-9 (EC Index-No.) 007-010-00-4 (REACH-no) 01-2119471836-27-XXXX	0.1 – 0.5	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Eye Irrit. 2, H319 Aquatic Acute 1, H400
aryl ether phosphate ester, potassium salt	(CAS-No.) 72283-31-9	< 0.1	Skin Irrit. 2, H315 Eye Irrit. 2, H319
disodium metasilicate	(CAS-No.) 6834-92-0 (EC-No.) 229-912-9 (EC Index-No.) 014-010-00-8	< 0.1	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
sodium xylene sulphonate	(CAS-No.) 1300-72-7 (EC-No.) 215-090-9 (REACH-no) 01-2119513350-56-0001	< 0.1	Eye Irrit. 2, H319
sodium hydroxide; caustic soda	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27-XXXX	< 0.1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1 H318 (0.5 ≤C < 2) Eye Irrit. 2, H319 (0.5 ≤C < 2) Skin Irrit. 2, H315 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C < 100) Skin Corr. 1A, H314
sodium sulphamidate	(CAS-No.) 13845-18-6 (EC-No.) 237-572-8	< 0.1	Not classified
disodium adipate	(CAS-No.) 7486-38-6 (EC-No.) 231-293-5	< 0.1	Not classified

See section 16 for full description of H statements.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

EYE CONTACT: Wash thoroughly with water for several minutes, holding the eyelids apart. Seek medical attention if irritation persists.
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: May cause slight irritation.
INHALATION: May cause slight irritation.
SKIN: May cause slight irritation.

INGESTION: May cause slight irritation.

4.3 Indication of any immediate medical attention and special treatments needed
Symptomatic treatment as required.

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 nitrogen and sulphur 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 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
Sodium hydroxide	-	2 mg/m^3	EH40

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. Open doors or windows if necessary. Avoid formation of spray or aerosols.

Hand Protection

Suitable chemical resistant gloves recommended for use with alkali materials. PVC or rubber 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 or safety glasses with side shields to protect from liquid splashes are recommended 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

a) Physical state	Liquid
b) Colour	Colourless
c) Odour	No data
d) Melting point/freezing point	Similar to water – approx. 0°C
e) Boiling point or initial boiling point and boiling range	Similar to water – approx. 100°C
f) Flammability	Not applicable - liquid
g) Lower and upper explosion limit	None
h) Flash point	None
i) Auto-ignition temperature	Not flammable
j) Decomposition temperature	No data
k) pH	Slightly alkaline
l) Kinematic viscosity	No data
m) Solubility	Miscible
n) Partition coefficient n-octanol/water (log value)	No data
o) Vapour pressure	No data
p) Density and/or relative density	1.02 g/cm³
q) Relative vapour density	No data
r) Particle characteristics	Not applicable - liquid

9.2 Other information
None

SECTION 10: Stability and Reactivity

10.1 Reactivity
Calcleanser is not considered to be reactive.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
May react vigorously with acids and reducing agents.

10.4 Conditions to avoid
Excessive heat.

10.5 Incompatible materials
Acids, reducing agents

10.6 Hazardous decomposition products
May release nitrogen and sulphur oxides if heated to decomposition.

SECTION 11: Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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	Based on available data, the classification criteria are not met. disodium metasilicate (6834 92 0) LC50 inhalation rat (Dust/Mist mg/l/4h) > 2.06 mg/l/4h sodium nitrite (7632 00 0) LD50 oral rat 180 mg/kg bodyweight
(b) skin corrosion/irritation	Based on available data, the classification criteria are not met.
(c) serious eye damage/irritation	Based on available data, the classification criteria are not met.
(d) respiratory/skin sensitisation	Based on available data, the classification criteria are not met.
(e) germ cell mutagenicity	Based on available data, the classification criteria are not met.
(f) carcinogenicity	Based on available data, the classification criteria are not met.
(g) reproductive toxicity	Based on available data, the classification criteria are not met.
(h) STOT-single exposure	Based on available data, the classification criteria are not met.
(i) STOT-repeated exposure	Based on available data, the classification criteria are not met. sodium nitrite (7632 00 0) NOEL, male, oral, rat 10 mg/kg bw/day (2 years)
(j) aspiration hazard	Based on available data, the classification criteria are not met.

11.2 Information on other hazards
None identified.

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
Calcleanser is not expected to be toxic in the environment.

sodium nitrite (7632 00 0)
LC50 fish 0.54 - 26.3 mg/l Rainbow trout (Onchorhynchus mykiss)
ErC50 (algae) > 100 mg/l (72 Hours)
EC50 daphnia15.4 mg/l (48 Hours)
EC50 microorganisms 421 mg/l (48 Hours)
NOEC fish, Chronic 6.61 mg/l (31 days)
NOEC daphnia, Chronic 9.86 mg/l (80 days)

12.2 Persistence and degradability
The organic components are all 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 Endocrine disrupting properties

None of the components are known to have endocrine disrupting properties.

12.7 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

Not classified as hazardous for transport.

	ADR	IMDG	ICAO
14.1 UN number or ID number	None	None	None
14.2 UN Proper shipping name	None	None	None
14.3 Transport hazard class(es)	None	None	None
14.4 Packing group	None	None	None
14.5 Environmental hazards	None	None	None
14.6 Special precautions for user	None	None	None
14.7 Maritime transport in bulk according to IMO instruments	None	None	None

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

H Statements used in Section 3
Ox. Sol. 2 H272 May intensify fire; oxidiser.
Met. Corr. 1 H290 May be corrosive to metals
Acute Tox. 3 H301 Toxic if swallowed.
Skin Corr. 1B H314 Causes severe skin burns and eye damage
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit.2 H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation
Aquatic Acute 1 H400 Very toxic to aquatic life.

Revision information:
Formatting updated to Regulation EU 2020/878