SAFETY DATA SHEET

Sludge & Flux

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
Sludge & Flux

1.2 Relevant identified uses of the substance or mixture and uses advised against
For use in 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
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
None required.

2.3 Other hazards
None known.

SECTION 3: Composition

3.1 Substances
Not applicable

3.2 Mixtures
An aqueous mixture of Isopropanol and cationic polyelectrolyte

Name	CAS No	Concentration	Classification
Isopropanol	67-63-0	<5%	Flam. Liq. 2 H225 Eye Irrit.2 H319, STOT SE 3 H336

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 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. Seek medical attention if discomfort occurs.

4.2 Most important symptoms and effects, both acute and delayed
EYES: Redness, stinging
INHALATION: Cough, drowsiness, dizziness
SKIN: Redness, stinging
INGESTION: Nausea, discomfort

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
None.

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
Propan-2-ol (Isopropanol)	400 ppm 999 mg/m^3	500 ppm 1250 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 and avoid formation of spray or aerosols.

Hand Protection
Suitable chemical resistant gloves - 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
Safety glasses or goggles to prevent splashes to the eye 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

9.1 Information on basic physical and chemical properties

Appearance: Colourless liquid
Odour: Slight alcoholic odour
Odour threshold: No data
pH: No data
Melting point: Similar to water – approx. 0°C
Boiling point: Similar to water – approx. 100°C
Flashpoint: None
Evaporation rate: 1.2 (Isopropanol)
Flammability (solids/gases): Not applicable
Upper/lower flammability limits: Not applicable
Vapour pressure: 4.3 kPa at 20°C (Isopropanol)
Vapour density Similar to water
Relative density 0.99
Solubility in water: Completely soluble
Solubility in other solvents: No data
Partition coefficient (log Kow) No data
Autoignition temperature Not combustible
Decomposition temperature No data
Viscosity Similar to water
Explosive properties Not classified as explosive
Oxidising properties Not classified as oxidising.

9.2 Other information

None

SECTION 10: Stability and Reactivity

10.1 Reactivity

Silt-Free is not considered to be reactive.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
None expected under normal conditions of use.

10.4 Conditions to avoid
Excessive heat.

10.5 Incompatible materials
Strong oxidising agents.

10.6 Hazardous decomposition products
None known.

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 Not expected to e hazardous by ingestion or inhalation.
(b) skin corrosion/irritation Not expected to be irritating to the skin based on consideration of its components.
(c) serious eye damage/irritation May be mildly irritating to the eye based on consideration of its components.
(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 above thresholds of concern. Prolonged inhalation may cause symptoms of drowsiness and dizziness.
(i) STOT-repeated exposure Contains no components known to cause specific target organ toxicity. Above thresholds of concern.
(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.

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 know 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

Not classified as hazardous for transport.

14.1	UN Number	Not applicable
14.2	UN Proper shipping name	Not applicable
14.3	Transport hazard class(es)	Not applicable
14.4	Packing group	Not applicable
14.5	Environmental hazards	Not applicable
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

Statements used in Section 3

Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit.2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

Revision information:

Updated to remove DSD and DPD classification and labelling information from sections 2 and 3.