



MATERIAL SAFETY DATA SHEET SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1

Product identifiers

Product name : Calcium Acetate for Soil Test

CAS-No. : 114460-21-8

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Bio-Chem Chemicals
5455 Nicholson Road, Science Market
Ambala Cantt, 133001 - Haryana
+91 82952 41953
info@biofinechemical.com - www.biofinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients 3.1

Substances

Formula : $C_4H_6CaO_4 \cdot xH_2O$
Molecular weight : 158.17 g/mol
CAS-No. : 114460-21-8

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 9. Flush eyes with water as a precaution.

4.3 Indication of any immediate medical attention and special treatment

If swallowed,
needed No data available

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or

mixture Carbon oxides, Calcium oxide

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

- 7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
hygroscopic
Storage class (TRGS 510): Non Combustible Solids
- 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. 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. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks.
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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|---|---|
| a) Appearance | Form: powder Colour: white |
| | No data available |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | Decomposes before melting. |
| e) Melting point/freezing point | |
| f) Initial boiling point and boiling range | No data available |
| g) Flash point | No data available |
| h) Evaporation rate | No data available The product is not flammable. - |
| i) Flammability (solid, gas) | Flammability (solids) |
| j) Upper/lower flammability or explosive limits | No data available |

k) Vapour pressure	No data available
l) Relative density	No data available
m) Water solubility	100 g/l at 25 °C - soluble
n) Partition coefficient: n-octanol/water	No data available
o) Auto-ignition temperature	340 °C
p) Decomposition temperature	Heating can release hazardous gases.
q) Viscosity	No data available
r) Explosive properties	No data available
s) Oxidizing properties	No data available

9.2 Other safety information

Dissociation constant 4.75 at 25 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - No data available Hazardous decomposition products formed under fire conditions. - Carbon oxides, Calcium oxide In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 2,700 mg/kg(Calcium acetate hydrate) (OECD Test Guideline 401) LC50 Inhalation - Rat - 4 h - > 5.6 mg/l(Calcium acetate hydrate) LD50 Dermal - Rabbit - > 20,000 mg/kg(Calcium acetate hydrate) (Read-across (Analogy))

Skin corrosion/irritation

Skin - Rabbit(Calcium acetate hydrate)
Result: No skin irritation
(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit(Calcium acetate hydrate)
Result: No eye irritation

(OECD Test Guideline 405)

Respiratory or skin sensitisation

Did not cause sensitisation on laboratory animals.(Calcium acetate hydrate)

No data available(Calcium acetate hydrate)

Germ cell mutagenicity

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available(Calcium acetate hydrate)

Specific target organ toxicity - single exposure

No data available(Calcium acetate hydrate)

Specific target organ toxicity - repeated exposure

No data available

Additional Information

Aspiration hazard

RTECS: Not available

No data available(Calcium acetate hydrate)

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1,000 mg/l - 96 h(Calcium acetate hydrate) (OECD Test Guideline 203) Remarks: Read-across (Analogy)
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Toxicity to daphnia and other aquatic	static test EC50 - Daphnia (water flea) - > 919 mg/l - 48 h(Calcium acetate hydrate)
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invertebrates	(OECD Test Guideline 202) Remarks: Read-across (Analogy)
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12.2 Persistence and degradability

Biodegradability	Result: - Readily biodegradable (C.4-A of the COUNCIL REGULATION (EC) No 440/2008)
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12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(Calcium acetate hydrate)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations/legislation

specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Bio-Chem Chemicals and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.biofinechemical.com for additional terms and conditions of sale.