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MSDS OF CALCIUM HYPOPHOSPHITE.

Section 1: Identification of the Substance

Product : Calcium hypophosphite
Formula : $\text{Ca}(\text{H}_2\text{PO}_2)_2$
Molecular Weight : 170.05 g/mol
Manufacturer : NEEMCCO.

Section 2: CAS Number

CAS No. : 7789-79-9

Section 3: Composition/Information on Ingredients

Substances

Molecular Formula : $\text{Ca}(\text{H}_2\text{PO}_2)_2$
Molecular Weight. : 170.05 g/mol

SECTION 4: Hazards identification

4.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable solids (Category 1), H228

For the full text of the H-Statements mentioned in this Section, see Section 16.

4.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Hazard statement(s)
Flammable solid.
Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Supplemental Hazard
Statements none

4.3 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 5: Composition/information on ingredients

5.1 Substances

Formula	: $\text{H}_4\text{CaO}_4\text{P}_2$
Molecular weight	: 170.05 g/mol
CAS-No.	: 7789-79-9
EC-No.	: 232-190-8

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

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 6: First aid measures

6.1 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.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

6.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

6.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 7: Firefighting measures

7.1 Extinguishing media Suitable extinguishing media

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

7.2 Special hazards arising from the substance or mixture

Oxides of phosphorus, Calcium oxide

7.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

7.4 Further information

Use water spray to cool unopened containers.

Section 8: Accidental release measures

8.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

8.2 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

8.3 Reference to other sections

For disposal see section 13.

Section 9: Handling and storage

9.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition

No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

9.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Flammable solids

9.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 10: Exposure controls/personal protection

10.1 Control parameters

10.2 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

Safety glasses with side-shields conforming to EN166 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

Section 11: Physical and chemical properties

11.1 Information on basic physical and chemical properties

a) Appearance	Form: powder Colour: white
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	Not applicable
h) Evaporation rate	No data available
i) Flammability (solid, gas)	The substance or mixture is a flammable solid with the category 1.
j) Upper/lower flammability or explosive limits	No data available

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|----|---|-------------------|
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n- octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

11.2 Other safety information

No data available

Section 12: Stability and reactivity

12.1 Reactivity

No data available

12.2 Chemical stability

Stable under recommended storage conditions.

12.3 Possibility of hazardous reactions

No data available

12.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

12.5 Incompatible materials

Oxidizing agents

12.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Oxides of phosphorus, Calcium oxide In the event of fire: see section 5

Section 13: Toxicological information

13.1 Information on toxicological effects Acute toxicity

No data available Calcium phosphinate

Skin corrosion/irritation

No data available (Calcium phosphinate)

Serious eye damage/eye irritation
No data available(Calcium phosphinate)
Respiratory or skin sensitisation
No data available(Calcium phosphinate)

Germ cell mutagenicity

No data available(Calcium phosphinate)
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 phosphinate)

Specific target organ toxicity - single exposure
No data available(Calcium phosphinate)
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available(Calcium phosphinate)

Additional Information
RTECS: Not available

Section 14: Ecological information

14.1 Toxicity

No data available

14.2 Persistence and degradability

No data available

14.3 Bioaccumulative potential

No data available

14.4 Mobility in soil

No data available(Calcium phosphinate)

14.5 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.

14.6 Other adverse effects

No data available

Section 15: Disposal considerations

15.1 Waste treatment methods Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

15.2 Contaminated packaging

Dispose of as unused product.

Section 16: Transport information

16.1 UN number

ADR/RID: 3178

IMDG: 3178

IATA: 3178

16.2 UN proper shipping name

ADR/RID: FLAMMABLE SOLID, INORGANIC, N.O.S. (Calcium phosphinate) IMDG: FLAMMABLE SOLID, INORGANIC, N.O.S. (Calcium phosphinate) IATA: Flammable solid, inorganic, n.o.s. (Calcium phosphinate)

16.3 Transport hazard class(es)

ADR/RID: 4.1

IMDG: 4.1

IATA: 4.1

16.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

16.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

16.6 Special precautions for user

No data available

Section 17: Regulatory information

17.1 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.

17.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

Section 18: Disclaimer

NEEMCCO provides the information contained here in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to appropriate precautionary handling of the material by properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose NEEMCCO.