SAFETY DATA SHEET

Revision date: 28-Jun-2023



Revision Number 5

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

| Product identifier | | | |
|--|---|--|--|
| Product Name | MONOCALCIUM PHOSPHATE | | |
| Product Code(s) | 00000008635 | | |
| Other means of identification | | | |
| CAS No. | 7758-23-8 | | |
| Synonyms | Calcium biphosphate; Calcium phosphate, monobasic; Phosphoric acid, calcium salt (2:1); Calcium bis(dihydrogen phosphate); MCP. | | |
| Recommended use of the chemical and restrictions on use | | | |
| Recommended use | Animal feed supplement. | | |
| Uses advised against | No information available | | |
| Supplier Ixom Operations Pty Ltd ABN: 51 600 546 512 Level 8, 1 Nicholson Street Melbourne 3000 Australia | | | |

Telephone Number: +61 3 9906 3000

Emergency telephone number

Emergency telephone number

1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

| Skin corrosion/irritation | Category 2 |
|--|------------|
| Serious eye damage/eye irritation | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |

SIGNAL WORD Warning

Label elements

Exclamation mark



Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Avoid breathing dust / fume / gas / mist / vapours / spray Wash face, hands and any exposed skin thoroughly after handling Wash eyes thoroughly after handling. Use only outdoors or in a well-ventilated area Wear protective gloves / protective clothing / eye protection / face protection **Precautionary Statements - Response** Specific treatment (see First aid on this SDS) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell **Precautionary Statements - Storage** Store in a well-ventilated place. Keep container tightly closed Store locked up **Precautionary Statements - Disposal** Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

General Hazards

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical name | CAS No. | Weight-% |
|-----------------------|-----------|----------|
| Monocalcium phosphate | 7758-23-8 | 98-100 |

4. FIRST AID MEASURES

Description of first aid measures

| General advice | For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. |
|----------------|---|
| Inhalation | Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. |

| | Consult a physician. | |
|--|---|--|
| Skin contact | Wash skin with soap and water. Get medical attention if symptoms occur. | |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur. | |
| Most important symptoms and effe | ects, both acute and delayed | |
| Symptoms | Irritation. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing. | |
| Indication of any immediate medical attention and special treatment needed | | |
| Note to physicians | Treat symptomatically. | |
| | | |
| 5. FIRE FIGHTING MEASU | RES | |
| Suitable Extinguishing Media | | |
| Suitable Extinguishing Media | Dry chemical, CO2, water spray or alcohol-resistant foam. | |
| Unsuitable extinguishing media | Water. | |
| Specific hazards arising from the c | hemical | |
| Specific hazards arising from the chemical | Non-combustible. | |
| Special protective actions for fire-fighters | | |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. | |
| 6. ACCIDENTAL RELEASE | EMEASURES | |
| | | |

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Avoid generation of dust. Ensure adequate ventilation. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling. | |
|--|--|--|
| For emergency responders | Use personal protection recommended in Section 8. | |
| Environmental precautions | | |
| Environmental precautions | See Section 12 for additional Ecological Information. | |
| Methods and material for containment and cleaning up | | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | |
| Methods for cleaning up | Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. | |

7. HANDLING AND STORAGE

Precautions for safe handling

| Advice on safe handling | Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Avoid generation of dust. Ensure adequate ventilation. Use personal protection equipment. Wash thoroughly after handling. | | |
|--|---|--|--|
| Conditions for safe storage, including any incompatibilities | | | |
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep container closed when not in use. | | |
| Incompatible materials | None known based on information supplied. | | |
| Poisons Schedule (SUSMP) | None allocated | | |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls Apply technical measures to comply with the occupational exposure limits.

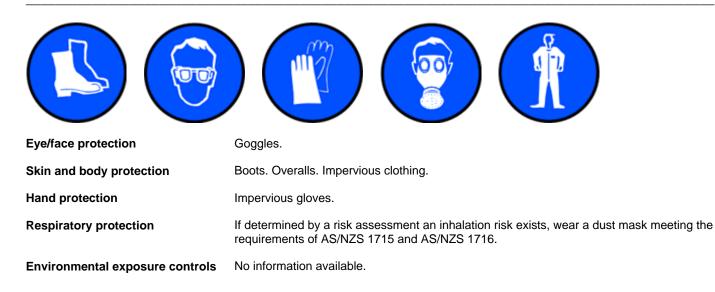
If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Method



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| information on basic physical and c | | |
|---|--------------------------|--------------------|
| Physical state | Solid | |
| Appearance | Crystalline | |
| Color | White | |
| Odor | Odourless | |
| Odor threshold | No information available | |
| Property_ | Values | <u>Remarks</u> • M |
| рН | No data available | None known |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | Not applicable | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Relative density | 2.22 | None known |
| Water solubility | 20 g/L | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| - | | |

Other information

10. STABILITY AND REACTIVITY

Reactivity

| Reactivity | No information available. | |
|--|---|--|
| Chemical stability | | |
| Stability | Stable under normal conditions. | |
| Explosion data Sensitivity to mechanical impact None. | | |
| Sensitivity to static discharge | None. | |
| Possibility of hazardous reactions | | |
| Possibility of hazardous reactions | None under normal processing. | |
| Conditions to avoid | | |
| Conditions to avoid | Heat. Moisture. Direct sunlight. | |
| Incompatible materials | | |
| Incompatible materials | None known based on information supplied. | |
| Hazardous decomposition products | | |

Hazardous decomposition products Phosphorus oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

| Product Information | No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are: |
|---------------------|---|
| Inhalation | Irritating to respiratory system. |
| Eye contact | Causes serious eye irritation. |
| Skin contact | Causes skin irritation. |
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. |
| Symptoms | Irritation. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing. |

Numerical measures of toxicity - Product Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------------|--------------------|-------------------|-----------------|
| Monocalcium phosphate | = 3986 mg/kg (Rat) | > 2 g/kg (Rabbit) | - |
| | | | |

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Causes skin irritation. |
|-----------------------------------|----------------------------------|
| Serious eye damage/eye irritation | Causes serious eye irritation. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | May cause respiratory irritation |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

12. ECOLOGICAL INFORMATION

| Ecotoxicity | |
|--------------------------------|---------------------------|
| Ecotoxicity | Keep out of waterways. |
| Densistance and dense debilite | |
| Persistence and degradability | |
| Persistence and degradability | No information available. |
| | |
| Bioaccumulative potential | |
| Bioaccumulation | No information available. |
| | |
| <u>Mobility</u> | |
| Mobility in soil | No information available. |
| | |

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. | |
|--|---|--|
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. | |

14. TRANSPORT INFORMATION

<u>ADG</u>

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

<u>IATA</u>

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

IMDG

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

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

National regulations

Australia

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

| International Inventories | |
|---------------------------|--|
| AIIC | |
| NZIoC | |

This material is listed on the Australian Inventory of Industrial Chemicals. This material is listed on the New Zealand Inventory of Chemicals.

Legend: AllC- Australian Inventory of Industrial Chemicals NZIOC - New Zealand Inventory of Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Supplier Material Safety Data Sheet 12/2018

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Issuing Date:

28-Jun-2023

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

| Legend Sectio | n 8: EXPOSURE CONTROLS/PERSONAL | PROTECTION | |
|---------------|---------------------------------|------------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| С | Carcinogen | | |

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet