

SAFETY DATA SHEET



Revision date: 09-Apr-2024

Revision Number 1

Section 1: Identification

Product identifier

Product Name Macrozol NPK plus Micro Nutrients

Product Code(s) 000000063165

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Nutritional additive. Fertiliser.

Uses advised against No information available.

Details of manufacturer or importer

Supplier

Sipcam Pacific Australia Pty. Ltd.
ABN: 94 073 176 888
Street Address: Level 1, 191 Malop Street
Geelong, Victoria, 3220
Australia

Telephone Number: +61 (0) 3 5223 3746 (business hours)

Facsimile: +61 (0) 3 5223 3756

Website: www.sipcam.com.au

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.

Section 2: Hazard identification

Not classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

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.

GHS Classification

Label elements

Signal word

Not Hazardous

Precautionary Statements - Prevention

Use personal protective equipment as required.

Precautionary Statements - Response

Get medical advice/attention if you feel unwell.

Precautionary Statements - Storage

No storage statements.

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**Section 3: Composition and information on ingredients**

| Chemical name | CAS No. | Weight-% |
|--------------------------------|-------------|----------|
| Urea | 57-13-6 | 10 - 30% |
| Potassium dihydrogen phosphate | 7778-77-0 | 10 - 30% |
| Citric acid | 77-92-9 | < 5% |
| Boric acid | 10043-35-3 | < 1% |
| Non-hazardous ingredients | Proprietary | Balance |

Section 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 | Move to fresh air in case of accidental inhalation of vapors or decomposition products. |
| Eye contact | In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. |
| Skin contact | Wash skin with soap and water. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Drink 1 or 2 glasses of water. Get medical attention if symptoms occur. |

Most important symptoms and effects, both acute and delayed

| | |
|----------------------------|---------------------------|
| Symptoms | No information available. |
| Effects of Exposure | No information available. |

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|---------------------------|------------------------|

Section 5: Firefighting measures**Suitable Extinguishing Media**

Suitable extinguishing media Use extinguishing agent suitable for type of surrounding fire.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products Nitrogen oxides. Carbon oxides. Phosphorus oxides. Potassium oxides. Metal oxides. Ammonia.

Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid contact with skin, eyes or clothing.

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. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect in properly labelled drums or other suitable containers, with loose fitting lids. After cleaning, flush away traces with water.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

General hygiene considerations Avoid breathing vapors or mists. When using do not eat, drink or smoke. Wash hands before breaks and after work.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong acids. Strong bases. Sodium hypochlorite.

Section 8: Exposure controls and personal protection

Control parameters

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

| Chemical name | Australia | New Zealand | ACGIH TLV |
|--------------------------|----------------|----------------|---|
| Boric acid 10043-35-3 | - | - | TWA: 2 mg/m ³ inhalable particulate matter STEL: 6 mg/m ³ inhalable particulate matter |
| Chemical name | European Union | United Kingdom | Germany DFG |
| Citric acid 77-92-9 | - | - | TWA: 2 mg/m ³ Peak: 4 mg/m ³ |
| Boric acid 10043-35-3 | - | - | TWA: 10 mg/m ³ Peak: 10 mg/m ³ |

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.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These 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. The 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 Showers
 Eyewash stations
 Ventilation systems.

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, SAFETY GLASSES, GLOVES.



Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Lightweight protective clothing.

Hand protection Rubber gloves.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|----------------|--------------------------|
| Physical state | Liquid |
| Appearance | Clear |
| Color | Light green |
| Odor | None |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| pH | 5.5 - 6.0 | 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 | No data available | 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 | 1.17 | None known |
| Water solubility | Soluble in water | 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

No information available

Section 10: Stability and reactivityReactivity

Reactivity Stable.

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 None known based on information supplied.

Incompatible materials

Incompatible materials Strong acids. Strong bases. Sodium hypochlorite.

Hazardous decomposition products

Hazardous decomposition products Nitrogen oxides. Carbon oxides. Phosphorus oxides. Potassium oxides. Metal oxides.

Section 11: Toxicological information**Information on likely routes of exposure****Product Information**

| | |
|---------------------|---|
| Inhalation | Vapors may be irritating to eyes, nose, throat, and lungs. |
| Eye contact | May cause irritation. |
| Skin contact | May cause irritation. |
| Ingestion | May cause gastrointestinal discomfort if consumed in large amounts. |

Symptoms No information available.

Acute toxicity**Numerical measures of toxicity - Product Information**

No information available

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|----------------------|-------------------------|-------------------------|
| Urea | = 8471 mg/kg (Rat) | - | - |
| Potassium dihydrogen phosphate | > 5000 mg/kg (Rat) | > 5000 mg/kg (Rabbit) | > 0.83 mg/L (Rat) 4 h |
| Citric acid | = 3000 mg/kg (Rat) | > 2000 mg/kg (Rat) | - |
| Boric acid | = 2660 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 2.12 mg/L (Rat) 4 h |

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 May cause skin irritation.

Serious eye damage/eye irritation May cause slight irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Based on available data, the classification criteria are not met. See section 2 for classified hazards based on component information.

| Chemical name | Australia | European Union | IARC |
|-------------------------|-----------|----------------|----------|
| Boric acid - 10043-35-3 | - | - | Group 2A |

IARC (International Agency for Research on Cancer)
Group 2A - Probably Carcinogenic to Humans

Reproductive toxicity The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

Boric acid (10043-35-3)

| | |
|---------|-----------------------|
| Results | Reproductive toxicant |
|---------|-----------------------|

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: Ecological information**Ecotoxicity**

Aquatic ecotoxicity The environmental impact of this product has not been fully investigated.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------|----------------------|--|----------------------------|--|
| Urea | - | LC50: 16200 - 18300mg/L (96h, <i>Poecilia reticulata</i>) | - | EC50: =3910mg/L (48h, <i>Daphnia magna</i>) |
| Citric acid | - | LC50: =1516mg/L (96h, <i>Lepomis macrochirus</i>) | - | - |
| Boric acid | - | - | - | EC50: 115 - 153mg/L (48h, <i>Daphnia magna</i>) |

Terrestrial ecotoxicity

| Chemical name | Earthworm | Avian | Honeybees |
|---------------|-----------|---|-----------|
| Boric acid | - | Dietary Toxicity: LC50 > 5620 ppm (<i>Anas platyrhynchos</i> 5 Days) Source: IUCLID Dietary Toxicity: LC50 > 5620 ppm (<i>Colinus virginianus</i> 5 Days) Source: IUCLID | - |

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Urea | -1.73 |
| Citric acid | -1.72 |
| Boric acid | -1.09 |

Mobility

Mobility Likely be mobile in the environment due to its water solubility.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation.

Contaminated packaging Dispose of in accordance with federal, state and local regulations.

See section 8 for more information

Section 14: Transport information

ADG 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.

IATA 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.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

Section 15: Regulatory information

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

National regulations

Australia

Not classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

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.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Australian Industrial Chemicals Introduction Scheme (AICIS)

| Chemical name | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|--|---|------------------------|
| Urea - 57-13-6 | Present | - |
| Potassium dihydrogen phosphate - 7778-77-0 | Present | - |
| Citric acid - 77-92-9 | Present | - |
| Boric acid - 10043-35-3 | Present | - |

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

| Chemical name | National pollutant inventory |
|-------------------------|---|
| Urea - 57-13-6 | 20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total |
| Boric acid - 10043-35-3 | 10 tonne/yr Threshold category 1 |

International Inventories**AIIC**

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

NZIoC

Contact supplier for inventory compliance status.

TSCA

Contact supplier for inventory compliance status.

DSL/NDSL

Contact supplier for inventory compliance status.

EINECS/ELINCS

Contact supplier for inventory compliance status.

ENCS

Contact supplier for inventory compliance status.

IECSC

Contact supplier for inventory compliance status.

KECL

Contact supplier for inventory compliance status.

PICCS

Contact supplier for inventory compliance status.

Legend:

AIIC- Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

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

Section 16: Other information

| | |
|-----------------------------|--|
| Reason(s) For Issue: | First Issue Primary SDS |
| Prepared By | This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services). |
| Issuing Date | 09-Apr-2024 |
| Revision date: | 09-Apr-2024 |

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

SVHC: Substances of Very High Concern for Authorization:
 PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
 vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
 STOT: Specific Target Organ Toxicity
 ATE: Acute Toxicity Estimate
 LC50: 50% Lethal Concentration
 LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| C | Carcinogen | | |

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

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 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)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 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)
 U.S. 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
 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 Sipcam Pacific Australia 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 Sipcam representative or Sipcam Pacific Australia Pty Ltd at the contact details on page 1.

Sipcam Pacific Australia 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