



SAFETY DATA SHEET

Revision date: 10-Sep-2024

Revision Number 5

Section 1: Identification

Product identifier

Product Name SODIUM HEXAMETAPHOSPHATE

Product Code(s) 000000034319

Other means of identification

CAS No. 10124-56-8

Chemical name Metaphosphoric acid (H6P6O18), hexasodium salt

Synonyms Calgon® T; Calgon® T Powder Food Grade; Calgon® T Food Grade Granular; Calgon® T Technical, Calgon® T Powder Technical; CALTPF; CALTF1; CALTT CALTPT; Amorphous Sodium Polyphosphate; Sodium Metaphosphate; Sodium Polymetaphosphate; Sodium Polyphosphate Glass; AASOD33470

Recommended use of the chemical and restrictions on use

Recommended use Food additive.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia
Street Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 309 2528

Facsimile: +64 9 0508 366 364

Emergency telephone number

Emergency Telephone 0 800 734 607 (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 Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

GHS Classification

Label elements

Signal word

None

Other hazards which do not result in classification

No information available.

Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%
Sodium hexametaphosphate	10124-56-8	>=99

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	Remove to fresh air. If symptoms persist, call a physician.
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. If symptoms persist, call a physician.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. 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: Fire-fighting measures****Suitable Extinguishing Media****Suitable Extinguishing Media** Dry chemical, CO₂, water spray or regular foam.**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Non-combustible. Avoid generation of dust. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Oxides of phosphorus. Oxides of sodium.

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 Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Avoid generation of dust. Ensure adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required.

Other information Ventilate the area.

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.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: Handling and storage**Precautions for safe handling**

Advice on safe handling Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Avoid generation of dust. Use personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Protect from moisture. Keep container closed when not in use.

Incompatible materials Acids. Reducing agent.

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for particulates:.

Particulates not otherwise classified: 8hr WES-TWA 10 mg/m³ (inhalable dust) or 3 mg/m³ (respirable dust)

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

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 Ensure adequate ventilation, especially in confined areas. 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, SAFETY GLASSES, GLOVES, DUST MASK.



Eye/face protection

Glasses.

Hand protection

Impervious gloves.

Skin and body protection

Overalls. Wear suitable protective clothing. Boots.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	No information available
Color	White
Odor	Odourless
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7	1 % aqueous solution
Melting point / freezing point	550 °C	None known
Boiling point / boiling range	1500 °C	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	1.25	None known
Water solubility	No data available	None known
Solubility(ies)	Soluble in water	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Particle characteristics

Section 10: Stability and reactivity

Reactivity

Reactivity Hygroscopic.

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 Dust formation. Protect from moisture.

Incompatible materials

Incompatible materials Acids. Reducing agent.

Hazardous decomposition products

Hazardous decomposition products Oxides of phosphorus. Oxides of sodium.

Section 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 May cause irritation. Breathing in dust may result in respiratory irritation.

Eye contact May cause irritation. Dust contact with the eyes can lead to mechanical 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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hexametaphosphate	= 6200 mg/kg (Rat)	-	> 3.69 mg/L (Rat) 4 h

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

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 No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Chronic effects: The toxicity of phosphates is because of their ability to sequester calcium. Sodium hexametaphosphate may sequester calcium and cause calcium phosphate deposits in the kidneys. Chronic ingestion or inhalation may induce systemic phosphorous poisoning. Liver damage, kidney damage, jaw/tooth abnormalities, blood disorders and cardiovascular effects can result. Repeated ingestion of some phosphates (120-240 gm/kg/day) has been shown to cause increased calcium excretion and soft tissue calcification in man.

Data used to identify the health effects Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium hexametaphosphate	-	LC50: >100mg/L (96h, Oncorhynchus mykiss)	-

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Mobility in soil

Mobility No information available.

Other adverse effects

No information available.

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

Section 14: Transport information

ROAD AND RAIL TRANSPORT	Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; 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
Special precautions for user	Please refer to the applicable dangerous goods regulations for additional information

Section 15: Regulatory information

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

EPA New Zealand HSNO approval code or group standard	Not applicable
National regulations	There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances
Certified handlers, tracking and controlled substance license requirements	<p>Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information</p> <p>Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information</p> <p>Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information</p>

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

International Inventories

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

AIIC This material is listed on the Australian Inventory of Industrial Chemicals.
TCSI Contact supplier for inventory compliance status.

Legend:**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**AIIC** **AIIC- Australian Inventory of Industrial Chemicals****TCSI** - Taiwan Chemical Substance Inventory**Section 16: Other information**

Prepared By This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).
Revision date: 10-Sep-2024
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Revision Note:

***Indicates updated data since last publication.

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
**	Hazard Designation	+	Sensitizers
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)

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 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 Bronson & Jacobs 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.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.

End of Safety Data Sheet