

Safety Data Sheet **AMMONIUM DIHYDROGEN ORTHOPHOSPHATE**

SDS no. TDKUDRDK • Version 1.0 • Date of issue: 2024-10-16

SECTION 1: Identification

GHS Product identifier

Product name AMMONIUM DIHYDROGEN ORTHOPHOSPHATE

Recommended use of the chemical and restrictions on use

Fireproofing agent, fertilizers, food additive, fermentations (yeast cultures), plant nutrient solutions, manufacture of yeast, vinegar, yeast foods and bread improvers, as baking powder with sodium bicarbonate and laboratory reagent.

Supplier's details

Name ChemSupply Australia Pty Ltd
Address 38-50 Bedford Street
5013 Gillman South Australia
Australia

Telephone 08 8440 2000
email www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

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Other Information: Generally applicable to ammonium salts: symptoms after swallowing may include local irritation, nausea, vomiting and diarrhoea.; Systemic effects: symptoms upon ingestion of large quantities may include a drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis and haemolysis.

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 115.03

Components

Component	CAS no.	Concentration
Monoammonium phosphate (EC no.: 231-764-5)	7722-76-1	<= 100 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	If contact with the eye(s) occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If persistent irritation occurs, obtain medical attention.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

Most important symptoms/effects, acute and delayed

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

Indication of immediate medical attention and special treatment needed, if necessary

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Specific Methods: Use measures suitable for extinguishing surrounding fire.

Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire such as nitrogen oxides and ammonia. Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. Containers may explode when heated. Runoff may pollute waterways.

Special protective actions for fire-fighters

Use suitable protective equipment for surrounding fire.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. For personal protection see section 8.

Methods and materials for containment and cleaning up

Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.

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

Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Corrosiveness: May be mildly corrosive to steel and aluminium.

SECTION 8: Exposure controls/personal protection**Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection**

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties**Basic physical and chemical properties**

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Physical state	Solid
Appearance	Colourless to white crystals or powder.
Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	190 °C
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	7.8 - 8.2 (5 g/l, H ₂ O, 20 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Soluble (370 g/L @ 20 °C) [13] Solubility in Organic Solvents: Slightly soluble in alcohol. Practically insoluble in acetone
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	0.066 hPa (125 °C)
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 1.8
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

None under normal use conditions.

Stable under normal conditions of storage and handling.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Contact with strong bases or magnesium releases ammonia. Contact with methenamine causes slow evolution of formaldehyde.

Hazardous Polymerization: Will not occur.

Conditions to avoid

Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials

Strong oxidizing agents, strong acids, strong bases, sodium hypochlorite, magnesium and methenamine.

Hazardous decomposition products

May liberate toxic fumes in fire such as nitrogen oxides and ammonia. Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine.

SECTION 11: Toxicological information**Information on toxicological effects****Acute toxicity**

Ingestion: Ingestion of large amounts may cause diarrhoea, nausea, vomiting, cramps, drop in blood pressure and disturbed electrolyte balance.

Inhalation: May cause irritation to the respiratory tract, nose and throat. Symptoms may include of coughing and choking.

Skin corrosion/irritation

May cause irritation to the skin.

Serious eye damage/irritation

May cause irritation to the eyes.

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Additional information

[2K] Chronic Effects: Repeated or prolonged skin contact may cause dermatitis.

SECTION 12: Ecological information**Toxicity**

Acute Toxicity - Fish: The following applies to ammonium ions in general:

biological effects: fish: toxic as from 0.3 mg/l

nourishment for fish: toxic as from 0.3 mg/l

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Other adverse effects

Further ecologic data:

Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of drinking-water supplies.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

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National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)