

Safety Data Sheet
According to Regulation (EC) No 1907/2006, Annex II,
Amended by COMMISSION REGULATION (EU) 2020/878,
According to REGULATION (EC) No 1272/2008

Ammonium Polyphosphate

Version 1.0

Issue date: 09-02-2023

Revision date: 09-02-2023

CIRS SDS Record Number: CSSS-TCO-010-154103

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: Ammonium Polyphosphate
Additional identification: Polyphosphoric acids, ammonium salts
Identification of the product: CAS# 68333-79-9; EC#269-789-9
Index Number: Not available
REACH registration No.: 01-2119489912-25-0006 (Diphosphorus pentaoxide);
01-2119490974-22-0063 (Diammonium hydrogenorthophosphate)

1.2 Relevant identified uses of the substance or mixture and uses advised against:

1.2.1 Identified uses:

Flame Retardant.
SU 1: Agriculture, forestry and fishing
SU 5: Manufacture of textiles, leather, fur
SU 6a: Manufacture of wood and wood products
SU 6b: Manufacture of pulp, paper and paper products
SU 18: Manufacture of furniture
SU 19: Building and construction work
SU 0: Other: Fire service activities (NACE 84.25)
SU 0: Other: Flame retardant
PC 12: Fertilisers
PC 34: Textile dyes, and impregnating products
PC 0: Other: Flame retardant

1.2.2 Uses advised against:

No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): Chemical Inspection & Regulation Service Limited
Supplier(Manufacturer): Quzhou Wellchem Industry Co., Ltd.
Address: 3F, No.2 Building Fortune Center, No.51 Xujiang Road, Quzhou West Zone,
324000 Zhejiang China
Contact person(E-mail): sales@wellchemicals.com.cn
Telephone: +86-570-3865576
Fax: +86-570-3865579

1.4 Emergency telephone Number:

+86-570-3865576 Only available during office hours (9:00a.m.-17:30p.m.)

Available outside office hours? YES NO

Section 2 Hazards identification

Product name: Ammonium Polyphosphate
Version #: 1.0 Issue date: 09-02-2023.

Revision date: 09-02-2023.

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2.1 Classification of the substance or mixture:

2.1.1 Classification of the substance:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Acute Tox. 4	H302
Eye Irrit. 2	H319

For full text of H- phrases: see section 2.2.

2.2 Label elements:

Hazard pictogram(s):



Signal word:

Warning

Hazard statement(s):

H302: Harmful if swallowed.

H319: Causes serious eye irritation

Precautionary statement(s):

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330: Rinse mouth.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P501: Dispose of contents/container in accordance with local regulations.

Supplemental Hazard information (EU)

Not applicable.

2.3 Other hazards:

The substance is not PBT / vPvB.

The substance is not identified as having endocrine disrupting properties.

Section 3 Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)
Polyphosphoric acids, ammonium salts	01-2119489912-25-0006 (Diphosphorus pentaoxide) ; 01-2119490974-22-0063 (Diammonium hydrogenorthophosphate)	68333-79-9	269-789-9	100%	N/A

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Assure fresh air breathing. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration. If symptoms

persist call a doctor.

4.1.2 In case of skin contact:

Wash immediately with plenty of soap and water. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse.

4.1.3 In case of eyes contact:

In case of eye contact, immediately rinse with clean water for 10-15 minutes. If symptoms persist call a doctor.

4.1.4 In case of ingestion:

Call a doctor. Do not induce vomiting. Immediately rinse mouth with water. Give nothing to drink. Seek medical advice if symptom persists.

4.2 Most important symptoms and effects, both acute and delayed:

Harmful if swallowed. Causes serious eye irritation

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: All extinguishing media can be used.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

When heated to decomposition, emits toxic fumes.

5.3 Advice for firefighters:

Self-contained breathing apparatus with full-face mask and full protective clothing (standard wear).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Personal protective equipment (see exposure controls / personal protection)

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental precautions:

Try to prevent the material from entering drains or water courses. Advice Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

6.3 Methods and material for containment and cleaning up:

Stop or confine leakage. Transfer the material to appropriate tanks or containers. Solution can be reused, recycled or disposed. Wash thoroughly after handling.

6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothing and shoes. Wash clothing before re-using.

7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Storage area should be cool, dry, well ventilated, out of direct sunlight.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=18.06 mg/m ³
General Population - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=4.45 mg/m ³
General Population - Hazard via oral route	Systemic effects-Long term exposure	DNEL=1.28 mg/kg bw/day

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses with side shields. Wear chemical goggles or face shield if splashings are generated when handling this material.

Skin protection

Hand protection: Wear chemical protective gloves.

Body protection: Protective clothing (with elasticated cuffs and closed neck)

Respiratory protection: No protection equipment under normal conditions of use. In case of ammonia emissions, use a facial mask with complete K2 filtrating cartridge.

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment. According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	Crystals or powder
Colour:	White
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point/freezing point (°C):	>= 141 - <= 225 °C
Boiling point or initial boiling point and boiling range (°C):	Not available
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (gas, liquid, solid):	Not available
Ignition temperature (°C):	Not available
Lower and upper explosion limit:	Not available
Vapour pressure (20°C):	0.076 Pa
Relative vapour density:	Not available
Relative Density (g/cm³):	1740 kg/m ³ (20.5 °C)
Bulk density (kg/m³):	Not available
Solubility in water (g/l, 20°C):	Very soluble
Solubility in other polar and non-polar solvents (g/l, 20°C):	Not available
Partition coefficient n-octanol/water	Not available

(log Po/w, 20°C):

Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Kinematic viscosity (mm ² /s):	Not available
Particle characteristics:	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	[NH ₄ PO ₃] _n
Molecular Weight:	Not available

9.2. Other information:

Fat solubility(solvent-oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	9.25(25 °C)
Oxidation-reduction Potential:	Not available

Section 10 Stability and Reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials. Moisture. Extremely high temperatures.
10.5 Incompatible materials:	Corrosive to brass, bronze, copper and aluminium. zinc.
10.6 Hazardous decomposition products:	Toxic vapours. (NO, NO ₂).

Section 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity:

LD50(Oral, Rat): Not available

LD50(Dermal, Rabbit): Not available

LC50(Inhalation, Rat): > 4.85 mg/L air (analytical) 4h

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

11.2 Information on other hazards

Endocrine disrupting properties: The substance is not identified as having endocrine disrupting properties.

Other information: Not applicable

Section 12 Ecological information

12.1 Toxicity:

Acute (short-term) toxicity:

LC50(96h, Fish): > 100 mg/L

EC50(48h, Crustacea): > 100 mg/L

EC50(72h, Algae/aquatic plants): > 97.1 mg/L

Chronic (long-term) toxicity:

NOEC(Fish): Not available

NOEC(Crustacea): Not available

NOEC(Algae/aquatic plants): 97.1 mg/L

12.2 Persistence and degradability: Not available

12.3 Bioaccumulative potential: Not available

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment: The substance is not PBT / vPvB.

12.6 Endocrine disrupting properties: The substance is not identified as having endocrine disrupting properties.

12.7 Other adverse effects: Not available.

12.8 Additional information: Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods:

Dispose of in accordance with all applicable local and national regulations. Use recovery/recycling where feasible, otherwise incineration is the recommended method of disposal. Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container. Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

Section 14 Transport Information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
14.1 UN number or ID number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)	Not regulated	Not regulated	Not regulated	Not regulated
14.4 Packing group	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	No	No	No	No
14.6 Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
14.7 Maritime	Not regulated	Not regulated	Not regulated	Not regulated

transport in bulk according to IMO instruments				
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Section 15 Regulatory information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment YES NO

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2020/878

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC)

1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
Acute Tox. 4	H302	On basis of test data
Eye Irrit. 2	H319	On basis of test data

16.5 Relevant H-statements (number and full text):

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

16.6 Training instructions:

Not applicable.

16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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