

Safety Data Sheet

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

1.1 Product identifiers

Product name: pNPP [4-Nitrophenyl phosphate, disodium salt] *CAS 333338-18-4*
Product number: 11619

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

Identified uses: For research use only. Not intended for diagnostic or therapeutic use.

1.3 Details of the supplier of the safety data sheet

Company: AAT Bioquest, Inc.
Address: 5775 W Las Positas Blvd, Pleasanton, CA 94588
Telephone: (408)-733-1055
Fax: (408)-733-1304
Email: info@aatbio.com

1.4 Emergency telephone number

Chemtrec (Within USA): 1-(800)-424-9300
Chemtrec (Outside USA): 1-(703)-527-3887

Section 2: Hazard identifications

2.1 Classification of the substance or mixture

Not hazardous

2.2 Label elements

Signal word: Not applicable
Hazard statements: Not applicable
Symbols/Pictograms: Not applicable
Precautionary statements - prevention: Not applicable
Precautionary statements - response: Not applicable
Precautionary statements - storage: Not applicable
Precautionary statements - disposal: Not applicable

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Hazards not otherwise classified (HNOC): None identified

2.4 Other information

Other hazards: Label Elements: None required. Hazards classified under paragraph (d)(1)(ii) of 1910.1200: No information available

Section 3: Composition/information on ingredients

3.1 Substances

Chemical name:	pNPP [4-Nitrophenyl phosphate, disodium salt] *CAS 333338-18-4*
CAS number:	333338-18-4
Molecular weight:	371.14
Formula:	Not available

Section 4: First aid measures

4.1 First-aid measures

General advice:	If symptoms occur, seek medical advice/attention.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin contact:	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation:	Remove to fresh air. Get medical attention immediately if symptoms occur.
Ingestion:	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Self-protection of the first aider:	Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	Most important symptoms and effects: None reasonably foreseeable.
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4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians:	Treat symptomatically
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Section 5: Firefighting measures

5.1 Suitable extinguishing media

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	No information available

5.2 Specific hazards arising from the chemical

Specific hazards arising from the chemical:	Keep product and empty container away from heat and sources of ignition.
Hazardous combustion products:	Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrogen oxides (NO _x). Oxides of phosphorus. Sodium oxides.

5.3 Explosion data

Sensitivity to mechanical impact:	No information available
Sensitivity to static discharge:	No information available

5.4 Protective equipment and precautions for firefighters

Protective equipment and precautions for firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Personal precautions: Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Environmental precautions: Should not be released into the environment.

6.3 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: Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Protect from light. Keep containers tightly closed in a cool, well-ventilated place. To maintain product quality: Keep refrigerated.

Incompatible materials: No information available.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Exposure guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Appropriate engineering controls

Engineering controls: None under normal use conditions.

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection: No protective equipment is needed under normal use conditions. Recommended Filter type: Particle filter.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and chemical properties

Physical state: Solid

Solubility in water: Moderate

Appearance: No information available.

Odor/odor threshold: Odorless

pH:	No information available
Melting point/freezing point:	> 300 °C / > 572 °F
Boiling point:	No information available
Flashpoint:	Not applicable
Liquid density:	No information available.
Evaporation rate:	Not applicable - Solid
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor pressure:	negligible
Vapor density:	Not applicable
Specific gravity:	No data available
Water solubility:	Soluble
Solubility in other solvents:	No information available
Partition coefficient:	Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt: log Pow -2.16
Autoignition temperature:	Not applicable
Decomposition temperature:	No information available.
Viscosity:	Not applicable
Explosive properties:	No information available.
Oxidizing properties:	No information available.

Section 10: Stability and reactivity

Reactivity:	None known, based on information available
Chemical stability:	Stable under normal conditions. Light sensitive.
Possibility of hazardous reactions:	Hazardous Reactions: None under normal processing.
Hazardous polymerization:	Hazardous polymerization does not occur.
Conditions to avoid:	Protect from light. Heat, flames and sparks.
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Oxides of phosphorus, Sodium oxides

Section 11: Toxicological information

11.1 Information on likely routes of exposure

Inhalation:	Avoid breathing dust or spray mist.
Eye contact:	Not an expected route of exposure.
Skin contact:	No known effect based on information supplied.
Ingestion:	No known effect based on information supplied.

11.2 Information on toxicological effects

Symptoms:	Symptoms / effects, both acute and delayed: No information available.
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11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity:

(b) skin corrosion/irritation; No data available (c) serious eye damage/irritation; No data available (d) respiratory or skin sensitization; Respiratory: No data available; Skin: No data available (e) germ cell mutagenicity; No data available (f) carcinogenicity; The table below indicates whether each agency has listed any ingredient as a carcinogen. 4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): IARC Not listed, NTP Not listed, ACGIH Not listed, OSHA Not listed, Mexico Not listed. Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): IARC Not listed, NTP Not listed, ACGIH Not listed, OSHA Not listed, Mexico Not listed (g) reproductive toxicity; No data available (h) STOT-single exposure; No data available (i) STOT-repeated exposure; No data available; Target Organs: No information available. (j) aspiration hazard; Not applicable; Solid Other Adverse Effects: The toxicological properties have not been fully investigated. Endocrine Disrupting Properties: This product does not contain any known or suspected endocrine disruptors.

11.4 Numerical measures of toxicity - product information

Unknown acute toxicity:

No information available.

Section 12: Ecological information

Ecotoxicity:

Do not empty into drains.

Persistence and degradability:

Soluble in water Persistence is unlikely based on information available.

Bioaccumulation:

No information available.

Mobility:

Will likely be mobile in the environment due to its water solubility.

Section 13: Disposal consideration

Disposal of wastes:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Contaminated packaging:

Do not reuse container.

Other information:

None

Section 14: Transport information

DOT:

Not regulated TDG: Not regulated

IMDG:

IMDG/IMO: Not regulated

IATA:

Not regulated

Section 15: Regulatory information

15.1 International Inventories

US Toxic Substances Control Act (TSCA):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): TSCA -; TSCA Inventory notification - Active-Inactive: -; TSCA - EPA Regulatory Flags: - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): TSCA X; TSCA Inventory notification - Active-Inactive: ACTIVE; TSCA - EPA Regulatory Flags: - Legend: TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710); X - Listed; ' - Not Listed TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT): Not applicable TSCA 12(b) - Notices of Export: Not applicable
Canada (DSL/NDSL):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): DSL -; NDSL - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): DSL X; NDSL -
Europe (EINECS/ELINCS/NLP):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): EINECS - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): EINECS 224-246-5
Australia (AICS):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): AICS - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): AICS X
South Korea (KECL):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): KECL - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): KECL KE-28617. KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)
China (IECSC):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): IECSC - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): IECSC X
Japan (ENCS):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): ENCS -; ISHL - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): ENCS X; ISHL X
Phillipines (PICCS):	4-Nitrophenyl phosphate, disodium salt, hexahydrate (333338-18-4): PICCS - Phosphoric acid, mono(4-nitrophenyl) ester, disodium salt (4264-83-9): PICCS -

15.2 US Federal Regulations

SARA 313:	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372
SARA 311/312 components:	Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.
CWA (Clean Water Act):	CWA (Clean Water Act): Not applicable

15.3 US State Regulations

California Proposition 65:	This product does not contain any Proposition 65 chemicals.
Massachusetts-RTK:	Not listed
New Jersey-RTK:	Not listed
Pennsylvania-RTK:	Not listed
U.S. State Right-To-Know Regulations:	U.S. State Right-to-Know Regulations: Not applicable

Section 16: Other information

16.1 HMIS

Health hazards:	Not determined
Flammability:	Not determined
Reactivity:	Not determined
Personal protection:	Not determined

16.2 NFPA

Health hazards:	Not determined
Flammability:	Not determined
Stability:	Not determined
Physical and chemical properties:	Not determined

16.3 Further information

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Users should make independent decisions regarding the completeness of the information based on all sources available. AAT Bioquest shall not be held liable for any damage resulting from handling or from contact with the above product.