



>>Entry Name: Ammonium phosphate ((NH₄)(H₂PO₄))

ENTRY UNDER REVIEW

Synonym(s): Monoammonium phosphate, 9Cl, 8Cl. Ammonium dihydrogenphosphate

CAS Registry Number: 7722-76-1

Related CAS Registry Numbers(s): 93454-15-0 93454-16-1

Extra CAS Registry Numbers(s): 10124-31-9

(NH₄)(H₂PO₄)

Molecular Formula: H₆NO₄P

Molecular Weight: 115.025

Accurate Mass: 115.003446

Percentage Composition: H 5.26%; N 12.18%; O 55.64%; P 26.93%

General Statement: Thermally the most stable of the ammonium orthophosphates. Each NH₄ cation is coordinated by 8 oxygens forming two interpenetrating tetragonal disphenoids. Mean P-O 153.7 pm

Source/Synthesis: Found as mineral in bat guano, W. Australia. May be synth. from Ammonium phosphate ((NH₄)₂HPO₄) [HTM76-I](#) at 150°

Use/Importance: Employed as a fertiliser and fire-retardant

Physical Description: Colourless, transparent tetragonal prisms (H₂O)

Melting Point: Mp 190°

Other Data: Low temp. orthorhombic, antiferroelectric phase transforms at -125° (rising temp.) into tetragonal, paraelectric phase

Aldrich: 20400-5

Fluka: 9717

Sigma: A1645

References:

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