

Ammonium PolyPhosphate

Suggested applications

It is an environment-friendly, non-toxic, halogen-free flame retardant. Widely used as a flame retardant in many applications such as paints and coatings, it can prepare a number of high-efficiency expanding flameproof coatings used in the construction industry, ships, trains, cables etc. Also suitable for the flameproof treatment of wood, plywood, fiberboard, paper, fibers, textiles, etc.

Physical properties

An inorganic salt of polyphosphoric acid and ammonia, with short chain and low polymerization degree, PH value is neutral. White powder or lumps, density 1.75-1.9g/cm³, easy to absorb water and good solubility. The water solution is clear. Long chain APP starts to decompose at temperatures above 300 ° C to polyphosphoric acid and ammonia. Short chain APP will begin to decompose at temperatures above 150 ° C.

Packaging & Storage

Packed in 25kg or 1000kg PP+PE bags.

Customized bags packing is available.

Stored at cool, dry and well ventilated place.

Target properties

Chemical formula	(NH ₄ PO ₃) _n (OH) ₂	
Phase	I	II
Molecular weight	97.01	
Phosphorus Pentoxide(P₂O₅)% ≥	69	71
Nitrogen (N) % ≥	14	14
Average Polymerization (n) % ≥	50	1000
Particle size (<45μm) % ≥	97	/
Solubility (g/mL H₂O) ≤	/	0.5
Moisture	0.5	0.25
PH value	5.5-7.5	

*permissible tolerance of 0.1-0.2% is possible for main content and moisture due to different testing methods under diverse conditions