



Ammonium Polyphosphate APP216H

Introduction:

Among the APP(II) series of nitrogen-phosphorus inorganic flame retardants, APP216H is a phase II ammonium polyphosphate surface treated with melamine. It is in high content of Phosphorus & Nitrogen, excellent thermal stability, near-neutral and non-toxic smoke property. With gas source and carbon source, it takes effect by char formation and intumescent mechanism.

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Test Item	Unit	Target value	DS ¹⁾	TD ²⁾
Whiteness	%	≥85	☑	○
Density	g/cm ³	~1.9	○	☑
Bulk Density	g/L	~700	○	☑
Polymerization Degree	—	~800	○	☑
pH Value (25℃, 10% Suspension)	—	~6.5	☑	○
Viscosity (25℃, 10% Suspension)	mPa.s	≤100	☑	○
Decomposition Temp.	℃	≥260	○	☑
Phosphorus	% (w/w)	~30.0	☑	○
Nitrogen	% (w/w)	~14.0	○	☑
Solubility In Water	% (w/w)	~0.5	☑	○
Average Particle Size (D ₅₀)	μm	~15	☑	○
Residue on Sieve	% (w/w)	0 (60 meshes)	○	☑
Water/Moisture	% (w/w)	≤0.5	☑	○
Toxicity And Environmental Hazard	—	Not Detected	○	☑

Note:

- 1) DS (Delivery specification): The product is monitored on a regular basis to ensure that it adheres to the specified values.
- 2) TD (Technical data): The technical data are used solely to describe the product and are not subject to regular monitoring.
- 3) ☑ means selected.

Characteristics:

1. Good thermal stability;
2. Low viscosity and good dispersity;

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3. Low water solubility, good anti-migration and anti-precipitation;
 4. High polymerization degree, narrow molecular weight distribution and less content of low polymerization substance;
 5. High purity of type II structure;
 6. Excellent particle size distribution.

Application:

APP216H is recommended in intumescent coating.

Package & Storage:

25kg/package. Transported as the common chemicals. Keep in dry, cool place and avoid direct sunlight.
