



TECHNICAL DATA SHEET

NAME OF COMMODITY: Ammonium Polyphosphate (APPII)

CAS NO.: 68333-79-9

MOLECULAR FORMULA: $(\text{NH}_4\text{PO}_3)_n$ $n > 1000$

ITEM	Unit	SPECIFICATION
Appearance		White Powder
Phosphorus	%(w/w)	31.0 - 31.5
Nitrogen	%(w/w)	14.0 - 15.0
Water / Moisture	%(w/w)	Max. 0.25
Density	g/cm ³	1.9
pH Value		5.5 - 7.5
Solubility In Water	%(w/w)	Max. 0.5
Decomposition Temperature	°C	> 275
Average Particle Size (D50)	µm	~ 10
Viscosity	mPa•s	Max. 50

APPLICATION:

APP is a non-halogen flame retardant. It acts as flame retardant by intumescence mechanism. When APP-II is exposed to fire or heat, it decomposes to polymeric phosphate acid and ammonia. The polyphosphoric acid reacts with hydroxyl groups to form a nonstable phosphate ester. Following dehydration of the phosphate ester, a carbon foam is built up on the surface and acts as an insulation layer.

APP is used in plastics PP, PVC, PE, etc., polyester, rubber, and expandable fireproof coatings.

PACKING: In 25 kg bag, 18 mt / 20' fcl, palletized.