

**PRODUCT SPECIFICATION**

**Ammonium Polyphosphate Phase-II  
(APP101)**

<b>Chemical Name</b>	: Ammonium Polyphosphate		
<b>Molecular Formula</b>	: (NH <sub>4</sub> PO <sub>3</sub> ) <sub>n</sub>		
<b>HS Code</b>	: 2835399000	<b>CAS number</b>	: 68333-79-9
<b>UN Code</b>	: Not Applicable	<b>DG Class/PKG GP</b>	: Not Applicable
<b>Applications</b>	: Solvent based and water based intumescent coatings and paints; Flame retardant for flexible and rigid urethane foams, polyurethane foam, PU, adhesive and sealants, thermoplastics, e.g. epoxy resin and unsaturated resin and polyesters, cellulose-containing material, e.g. paper, textile, wood, polyolefin, rubber and cable material, e.g. PP, PE, EVA.		
<b>Packaging</b>	: 25kg bag, 20MT per 20-ft FCL container with pallet		

<b>Characteristics</b>	<b>Unit</b>	<b>Guaranteed Values</b>
Appearance	-	White free-flowing powder
Whiteness (Reflectance)	-	92.0 Min
pH (10% slurry @ 25°C)	-	5.5 - 7.5
Acid Value	KOH mg/g	1.0 Max
Solubility in Water @25°C	g/100ml H <sub>2</sub> O	0.50 Max
Nitrogen	w/w%	14.0 - 15.0
Phosphorus (P)	w/w%	31.0 - 32.0
Water	w/w%	0.25 Max
True Density	g/cm <sup>3</sup>	Approx. 1.9
Bulk Density	g/cm <sup>3</sup>	Approx. 0.7
Viscosity (10% slurry @ 25°C)	mPa.s	80.0 Max

Characteristics	Unit	Guaranteed Values
Thermal Decomposition Onset (scan rate 30°C/min)	°C	285 Min
Average Particle Size, D50	µm	About 15
Particle size < 50 µm	%	95 Min
Particle size > 100 µm	%	0.2 Max
Weight Loss @ 350°C	w/w%	About 5
Weight Loss @ 450°C	w/w%	About 10
Weight Loss @ 550°C	w/w%	About 20