

### APP102 Melamine cladding ammonium polyphosphate(crystal II , n>1000)

#### Specification:

Appearance	—	White free-flowing powder
Whiteness (Reflectance)	—	≥ 92.0
pH value, 10% suspension, 25 °C	—	7.5 – 9.0
Solubility in Water, 25 °C, g/100mLH <sub>2</sub> O	% (w/w)	≤ 0.05
Nitrogen	% (w/w)	18.0-20.0
Phosphorus	% (w/w)	28.0-30.0
Viscosity, 10% suspension, 25 °C	mpa.s	≤ 20.0
Degree of polymerization	—	> 1000
Average Particle Size (D50)	μm	approx. 15
Particle Size Distribution	% (w/w)	
	> 45 μm	≤ 1.0
	> 74 μm	≤ 0.2

### APP102 equivalent to Clariant GmbH's Exolit AP 462

#### Key properties:

APP 102 is a product based on ammonium polyphosphate. It is manufactured from APP 101 by microencapsulation with melamine resin according to our own method.

1, Very low water solubility - APP102 has low water solubility that is no more than 0.10g/100mLH<sub>2</sub>O at 20 degrees C, which makes it useful in application where the product is exposed to high humidity conditions or water.

2, High phosphorus content and nitrogen content- -APP102 contains 68.0% phosphorus (as P<sub>2</sub>O<sub>5</sub>) and 18.0% nitrogen which makes it a very effective fire retardant.

3, Low viscosity - viscosity of -APP102 is below 20mpa.s.

4, Thermal decomposition onset that is above 295 degrees C, which makes it be widely used to plastic with different melt-point temperature.

5, Non-halogen- -APP102 is a highly effective non-halogen fire retardant.

#### Applications:

1, -APP102 can be used advantageously in intumescent coating for exterior application where the ammonium polyphosphate is required to have extremely low water solubility

#### 上海办 Shanghai Office

上海市浦东新区牡丹路 89 弄 4 号 602 室  
R602,4#,89Nong, Mudan Road Pudong  
Shanghai, China  
Tel: 0086 21 6845 1592  
Fax: 0086 21 6845 0923

...www.mintchem.com...

#### 长沙办 Changsha Office

长沙市劳动西路 108 号长沙市化工研究所 HX 楼 707 室  
HX707 ,108# Laodong Road West Changsha,  
Hunan,China  
Tel: 0086 731 85518147 8551 8261  
Fax: 0086 731 5518 167/ 5530 767



上海明太化工发展有限公司

Shanghai Mintchem Development Co.,Ltd.

2, -APP102 can be used in cellulose-containing materials (paper, wood, car's fireproof cloth, military cellulose materials).

3, -APP102 can be used in various polymers for exterior application.

**Package:**

25 kg net bag with PE liner or 500 kg, 600kg net big bag or on customer's request.

**Storage and Handling:**

Store in a dry and cool area.

Avoid inhalation, ingestion, and contact with eyes and skin.

**上海办 Shanghai Office**

上海市浦东新区牡丹路 89 弄 4 号 602 室  
R602,4#,89Nong, Mudan Road Pudong  
Shanghai, China  
Tel: 0086 21 6845 1592  
Fax: 0086 21 6845 0923

...www.mintchem.com...

**长沙办 Changsha Office**

长沙市劳动西路 108 号长沙市化工研究所 HX 楼 707 室  
HX707 ,108# Laodong Road West Changsha,  
Hunan,China  
Tel: 0086 731 85518147 8551 8261  
Fax: 0086 731 5518 167/ 5530 767