

### Ammonium Polyphosphate I(APP-I)

#### 1. Brief Introduction:

Ammonium polyphosphate(APP) molecular formula( $\text{NH}_4\text{PO}_3$ ) $_n$ ,  $n > 50$ , the water-solubility is less than 2g/100ml. As inorganic chain polymer, there's P-N collaboration effect because of high phosphorus and nitrogen content, so it has excellent fire retardant effect. It can be used in architecture, shipping, cable field and so on. It is also used as an essential fireproofing additive in expansive fireretardant coating and fire retardants.

#### 2. Performance index:

Item No.: HG/T2770-1996

| Item                              | unit                    | specification |
|-----------------------------------|-------------------------|---------------|
| Appearance                        |                         | White power   |
| Content of $\text{P}_2\text{O}_5$ | % (w/w)                 | $\geq 69$     |
| Content of N (%)                  | % (w/w)                 | 14-15         |
| Average polymerization degree n   | n                       | $\geq 50$     |
| PH value                          | 1% water solution, 25°C | 6.0±0.5       |
| Average particle size D50         | $\mu\text{m}$           | 6~12          |

Remark: Accord with EU RoHS.

#### 3. Use

- 1) Confect various effective expansive fireretardant coating, which can be used as fireproofing in high architecture, shipping, train, cable.
- 2) Used as fire retardant treating in lignum, veneer, fiberboard, paper, fiber.
- 3) Major fire retardant additive in plastic, resin and rubber such expanded fire retardant (IFR).
- 4) Made into dry power used in extinguishing large area fire in forest, oil field, and coalfield.

#### 4. Packing

25kg in a polypropylene woven bag with plastic film inner lining.