



FaRetar Flame Retardant Technology Co., Ltd.

Office: Building 8, Weifang Yuandu Huizhi Industrial Park No.3999,
Taixiang West Street, Economic Developing Zone,
Weifang, Shandong, China.

Post code: 261031 Tel: + (86) 536 8826089 Fax: + (86) 536 8057018

Email: info@faretar.com Web site: <http://www.faretar.com>

FARETAR™ APP

Ammonium Polyphosphate (APP)

Product description

FARETAR™ APP is a halogen-free flame retardant polymerized with ammonium phosphate. **FARETAR™ APP** is divided into two grades, **APP101** with good moisture resistance and **APP102** with excellent weather resistance.

Molecular Structure	$ \begin{array}{c} \text{O} \quad \quad \text{O} \quad \quad \text{O} \\ \parallel \quad \parallel \quad \parallel \\ \text{NH}_4 - \text{O} - \text{P} - \text{O} - [\text{P} - \text{O}]_n - \text{P} - \text{O} - \text{NH}_4 \\ \quad \quad \quad \quad \\ \text{O} \quad \quad \text{O} \quad \quad \text{O} \\ \quad \quad \quad \quad \\ \text{NH}_4 \quad \text{NH}_4 \quad \text{NH}_4 \end{array} $
Chemical Name	Ammonium Polyphosphate
Formula	$(\text{NH}_4\text{PO}_3)_n$
CAS Number	14728-39-3
Appearance	White powder

Comparable grade

Exolit AP422/AP423

Characteristics

FARETAR™ APP101 has strong moisture resistance, alkaline pH value and low water solubility after surface treatment.

FARETAR™ APP102 has excellent weathering properties and high stability. It can improve the water resistance of products in the coating.

Application

FARETAR™ APP can be used for foaming fireproof materials, such as polyurethane, UF resin, epoxy resin, fibers, wood and plastics etc.

FARETAR™ APP is the main composition of intumescent flame retardant (IFR). And the PP products added with IFR can achieve UL94-V0.

Specification

Item	FARETAR™ APP101	FARETAR™ APP102
P content, %	28 - 30	31 - 32
Water solubility 25°C, g/100 cm ³	≤ 0.20	≤ 0.20
pH Value	7.0-9.0	5.5 - 7.5
Particle size, μm	≤ 25	≤ 25
Thermal decomposition, °C	≥ 290	≥ 290
Viscosity, mPa.s	≤ 20	≤ 50
Treatment	Coated with Melamine	---

*Test method: Q/0783FRT 009-2019

Packaging

25 kg woven bags

Storage

Store the product in a cool, dry, well - ventilated area