

BOGIFLAM NP20

PHOSPHORUS & NITROGEN FLAME RETARDANT SYNERGIST

PRODUCT IDENTIFICATION

Chemical Name:	Phosphorus-Nitrogen compound
Physical Form:	White powder
CAS Number:	2082-79-3
Composition:	Nitrogen ~ 19%, Phosphorus ~ 20%

BOGIFLAM NP20 is a highly efficient, halogen-free intumescent flame retardant for polyolefins (PP, PE, EVA) and various rubber systems. It is a nitrogen-phosphorus compound combining both elements in an optimised ratio within a single molecule, and it meets RoHS requirements while providing an expansion-type, low-smoke flame-retardant effect.

During thermal cracking or combustion, BOGIFLAM NP20 expands at the resin surface to form a porous char layer that traps heat, excludes oxygen and prevents melting drips, while suppressing smoke and avoiding the release of toxic or corrosive gases.

SPECIFICATION

Property	Test Method	Units	Value
Appearance	-	-	White powder
Density	-	g/cm ³	1.7
Humidity	-	%	< 0.5
Melting point	-	-	Decomposes > 270 °C
Bulk density	-	kg/m ³	~ 400
Particle size (D98)	-	microns	< 30

APPLICATIONS

- Typical dosage ranges from 18% to 35%, depending on the polymer, formulation and target flame-retardancy rating. For UL-94 V-0 (1.6 mm) on natural PP homopolymer without anti-dripping agents, a dosage of around 30% is suggested.
- Mainly used for the flame retardancy of thermoplastic polyolefins such as polypropylene (PP), polyethylene (PE) and ethylene-vinyl acetate copolymer (EVA), as well as other polyolefin blends. It can also be used in glass-fibre-reinforced PP, filled PP and similar products.

PROCESSING

- Thermally stable up to 250 °C. Lower melt temperatures are always recommended.

PACKAGING & STORAGE

- Packaging: 1 pallet = 1,000 kg.
- Store away from direct sunlight and heat at temperatures below 30 °C. Use within 12 months of the production date.

IMPORTANT NOTICE

Please read the Material Safety Data Sheet (MSDS) carefully before using this product.