

Plastic & polymer additives and solution supplier E:info@novistagroup.com I: www.novistagroup.com

Technical Data Sheet

ProFlame® PN5131

ProFlame-PN5131 is based on speciall structured organic phosphorus salt. It is designed for high performance flame retardant engineering plastics such as nylon(PA6,PA66). This product is not subject to foreign enterprise patents.



CAS NO.:2725791-55-7

PN5131 has the following characteristics compared with Aluminium diethylphosphinate(ADP):

- 1. Both of them have excellent electrical properties, with CTI up to 600V.
- 2. The nylon products made of the two are transparent, easy to match colors and stable in color, and do not precipitate, especially in the small, thin wall, and brightly colored products;
- 3. PN5131 has better flame retardance than ADP, with lower addition. The main reason is that the phosphorus content of PN5131 is higher than that of ADP, and the carbon shell is thick.
- 4. PN5131 does not need to be compounded with MPP, it can achieve low addition, high efficiency flame retardant characteristics, and high temperature and high humidity without precipitation and degradation.
- 5. PN5131 has higher temperature resistance than ADP, It is more suitable for HTPA such as PA66,PA9T,PA10T.

Technical Data:

Items	Spec		
Appearance	White free-flowing powder		
Decomposition Temperature, °C	≥390		
Average particle size, um (D50)	10-15		
Moisture,%	≤0.5		
Whiteness	≥95		
Bulk density, g/cm3	0.6-0.7		

Recommended dosage:

Polymer	Dosage	UL-94	GWIT	СТІ
30%GF-Reinforced PA6	16-17%	V0(1.6mm)	730°C (2mm)	600V(4mm)
30%GF-Reinforced PA66	15-16%	V0(1.6mm)	720°C (2mm)	600V(4mm)

Processing instruction:

- 1. Pre-drying the polyamide, the moisture content should be below 0.1 % (by wt.).
- 2. The optimum conditions for incorporating should be determined in each individual case. Care must be taken to ensure homogeneous dispersion of all components.
- 3. The temperature of the polymer melt should not exceed 360 °C.
- 4. It is most suitable for equipment with weak shear force.
- 5. High-quality non-alkali fiberglass is preferred



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Package & Storage:

Net weight 25KG Kraft bag with PE liner. Minimum shelf life is 12 months stored in a dry and ventilated warehouse.

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