



Flame retardant

DovaFR PA 312b

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Halogen-free flame retardant for Nylon (PA)

Product Description

DovaFR PA 312b is kind of halogen-free organic phosphorous flame retardant. It is white powder with larger particle size, high hydrophobicity, high temperature resistance and non-migration. DovaFR PA 312b is mainly used in engineering plastic such as PA6, PA66(with glass-fiber), especially for electric and electronic products which must have a high flame retardant and high electrical performance.

Benefits

- DovaFR PA 312b has large particle size and low material density.
- DovaFR PA 312b is White free-flowing crystalline powder.
- DovaFR PA 312b has high flame retardant efficiency, small addition amount and good dispersion.
- Good contrast in laser marking.
- If no metal corrosion contact, there is too small amount of precipitation, under high temperature and high humidity environment.
- Wide processing window. It brings less gas and mold fouling. Lower corrosion of equipment components in processing.

Specifications

Characteristics	Unit	Standard Request	Test Method
Appearance		White powder	Visual
Decomposition temperature	°C	350 Min (weight lost 2%)	TGA (10°C/min, in air)
Moisture	% (w/w)	0.5 Max	Karl-Fischer titration
P content	% (w/w)	24.5~25.5	Inductively coupled plasma emission spectrometer
Bulk density	g/cm ³	Approx.450~600	at 20°C
Average Particle Size(D50)	µm	20~50	Laser diffraction

¹⁾ Delivery specification: The product is monitored on a regular basis to ensure that it adheres to the specified values.

²⁾ Technical data: The technical data are used solely to describe the product and are not subject to regular monitoring.

Applications

DovaFR PA 312b is mainly applied in polyamides (PA). It is suited for both glass-fibre-reinforced and unreinforced grades with good mechanical and electrical properties.

Recommended dosage

Product	PA 6 + 30% Glass Fiber	PA 66 + 30% Glass Fiber
DovaFR PA 312b	14~ 20	14~20
UL94	V0(3.2-0.8 m)	V0(1.6 -0.4 m)

Delivery Form

White powder

Processing

Before processing, nylon should be dried, if possible, the moisture content should be less than 0.1% (by weight). It is not necessary for DovaFR PA 312b. Please make sure that all ingredients are evenly dispersed, and the processing temperature should not exceed 340°C.

Note: Nylon toughener, polyolefin, EBS and other ingredients shall seriously affect the effect.

Carbon black will bring negative impact on CIT. It is recommended to be compound or use organic black alone.

Packaging

DovaFR PA 312b is supplied in 25 kg craft paper bag / 1.000 kg shrink-wrapped pallet.

Storage

DovaFR PA 312b is in sealed containers at room temperature in a dry place. Partially emptied containers should be carefully resealed after use.

Minimum shelf life is 24months from the date of shipping when stored according to the said conditions.

Contact Us

Please contact us for safety and regulatory details or the Material Safety Data Sheet (MSDS).