



Masterbatches e Additivi per Materie Plastiche ed Elastomeri

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FerroFlam PA RPM 440B

Informazioni Tecniche

Flame Retardant for Polyamides

Product description

FERROFLAM PA RPM 440B is a non -halogenated flame retardant based on red phosphorus, particularly suitable for polyamide articles. It is offered as a free-flowing and dust-free master batch in **dark red pellets** form which makes it very easy to handle, accurate to dose and safe to process, allowing high consistency in the quality of the final article.

FERROFLAM PA RPM 440B is based on stabilized and micro-encapsulated red phosphorus powder grades and polyamide as a carrier resin. It is easy to be homogeneously dispersed in the polymer compound.

Delivery Specifications and Technical data

Characteristics	unit	Target Value	DS 1)	TD 2)
Phosphorus	%(w/w)	46-48	√	/
Moisture	%(by wt)	max 0.1	√	/
Density	g/cm ³	approx.1.5	/	√
Bulk density	kg/cm ³	approx.900	/	√
Fire Temperature	°C	> 320	/	√

- 1) The product is constantly monitored to ensure that it adheres to specified values.
- 2) The technical data are used solely to describe the product and are not subject to constant monitoring.

Applications

FERROFLAM PA RPM 440B is the master batch developed especially for use in polyamides. It is suited for both glass-fiber reinforced and non-reinforced grades. The FR polyamide compounds exhibit very good physical and electrical properties.

Formulation

In glass-fiber-reinforced PA6 or PA66, a recommended dosage should range from 10 to 14%(by wt) based on the weight of polymer, depending on PA grade, processing conditions and glass fiber content and the required flame retardancy class. Specifically, in PA66 with 30% glass fiber, a dosage of 13% to 14% is usually sufficient to meet the high level demanding applications for electrical components (i.e.V-0 at 0.8mm in thickness according to UL94, CTI > 400V).

Processing

FERROFLAM PA RPM 440B is endowed with high thermal stability particularly for all polyamide grades (aromatic and aliphatic, homo-polymer and co-polymer) and glass-fiber reinforced.

It is suitable temperatures rise up to 320°C without degrading or releasing die build-up or carbonaceous residues in hot runners. However, the following processing instructions have to be considered:

- 1) Polymer pellets/powders which are processed together with **FERROFLAM PA RPM 440B** should, if necessary, be pre-dried. The residual moisture content should be under 0.1%. Many polymer grades fulfil this requirement without pre-drying.
- 2) The maximum temperature of the polymer melt should not exceed 320°C.
- 3) Drying of the pellets immediately after compounding is recommended. It is best to use a strand pelletizer with as short a water bath as possible.

Packaging

FERROFLAM PA RPM 440B is delivered in 25kg Multi-layer sealed bags, or per customer's requirements.