

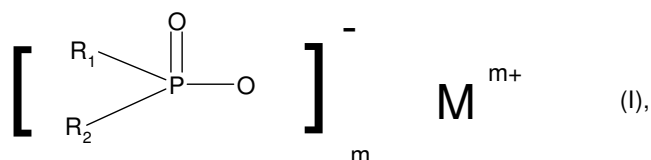
Abstract

Flame-retardant polyamide compositions having high heat dimensional resistance and use thereof

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The invention relates to flame-retardant polyamide compositions having a heat deflection temperature HDT-A of not less than 280°C, comprising

- polyamide having a melting point of not less than 290°C as component A,
- fillers and/or reinforcers as component B,
- 10 - phosphonic salt of the formula (I) as component C



in which R₁ and R₂ are ethyl,

M is Al, Fe, TiO_p or Zn,

m is 2 to 3, and

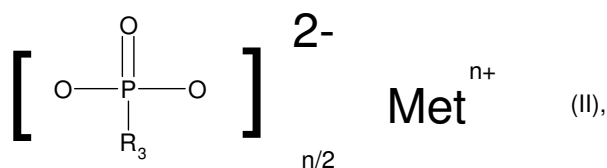
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$$p = (4 - m) / 2$$

- compound selected from the group of the Al, Fe, TiO_p and Zn salts of ethylbutylphosphonic acid, of dibutylphosphonic acid, of ethylhexylphosphonic acid, of butylhexylphosphonic acid and/or of dihexylphosphonic acid as component D, and

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- phosphonic salt of the formula (II) as component E



in which R₃ is ethyl,

Met is Al, Fe, TiO_q or Zn,

n is 2 to 3, and

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$$q = (4 - n) / 2.$$

The polyamide compositions can be used for production of fibers, films and shaped bodies, especially for applications in the electricals and electronics sector.