NOVEL POLYMERIC, NON-HALOGENATED FLAME RETARDANTS WITH BROAD APPLICABILITY IN MULTIPLE INDUSTRIES

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FRX POLYMERS® is the first company to develop halogen-free polymers based on phosphorus for use as non-migrating flame retardant (FR) additives. These unique polymers have been commercialized under the brand name NOFIA® and can be used as standalone, inherently FR materials but also deliver FR performance and additional beneficial properties when blended with polycarbonate, polyesters, (thermoplastic) polyurethane, unsaturated polyesters, and epoxies. Many of these blends are transparent and thus, NOFIA enables the production of e.g. transparent PC blends with a UL94 V0 performance at thicknesses as low as 0.4mm. A number of industrial applications will be highlighted and the FR mechanism for these polyphosphonate materials will be discussed.