ASPECTS OF FLAME RETARDANTS AND THEIR ROLE IN SOCIETY

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Abstracts. Flame retardants are extremely important in a lot of industrial application, and their use has expanded greatly. Among the most widespread are brominated flame retardants, low cost due and extremely effective at what they do. Reactive flame retardants - are usually introduced during the polymerization stage and copolymerized, together with other monomers, for example the main reactive retardants for polyesters are brominated retardants which are said to be 70% more efficient than chlorinated retardants. Flame retardants additive can be inorganic (hydrated alumina, antimony trioxide, magnesium hydroxide, phosphorus), halogenated compounds (chlorinated compounds and brominated compounds). This paper aims to make a review of the properties listed flame retardants, of their usefulness in society and the law governing their use.

Keywords: flame retardants, classification of flame retardants, brominated retardants, properties of flame retardants.

1. Introduction

Flame Retardants are extremely important in protecting people and property from fire. Flame retardants are additives that can be added to or applied as a treatment to organic materials such as plastics, textiles and timber. Flame retardants additives work by breaking one of the links that produce and support combustion: heat, fuel and air. They may quench a flame by depriving it of oxygen or may absorb heat and produce water, so reducing the temperature. Experience has shown that fire itself is not the real hazard: far more dangerous to people are the toxic by-products generated during combustion, and dense smoke that prevents people from escaping in time. The control of these is becoming the decisive factor in assessing flame retardant additives. Correct selection and utilization of the type of flame retardant dependent on a number of criteria. The process is very complex and regards suitability, performance, health and safety, end of life and of course cost issues require consideration. The flame retardant must be compatible with

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