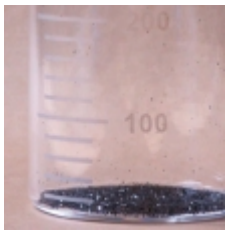
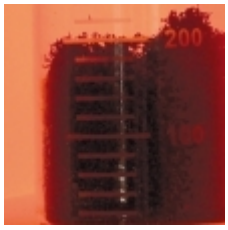
Halogen and heavy metal-free flame retardant for polymer materials

Despite decades of industrial experience and research in the field of flame retardants, most flame retardant additives are still either not sufficiently effective or are toxicologically questionable. For some years now, expandable graphite (a natural mineral-based material) has provided an effective and environmentally friendly alternative to conventional flame retardant additives and has already proved successful in a number of applications.



Heat causes expandable graphite to expand to a multiple of its original volume



Expandable graphite can easily be introduced into polymer materials and coating systems. In the event of a fire, the heat causes the expandable graphite to expand hundreds of times its original volume, which then forms an intumescent layer on the surface of the material. This prevents the fire from spreading, or slows it down, and reduces toxic gases and smoke which, for humans, are the most dangerous consequences of such fires. Expandable graphite is particularly suitable as a flame retardant in polymer foams, films and coatings.

Besides providing standard quality at minimum cost, **Georg H. Luh GmbH** also offers products tailored for special applications, with a product range including, for example, pH-stabilised expandable graphite and products with special particle size or starting temperature requirements. For more than 75 years, the company is a supplier of industrial mineral-based raw materials, especially in the field of graphite and mica.

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http://www.gupta-verlag.com/general/news/technology/8666/halogen-and-heavy-metal-free-flame-retardant-for-polymer-materials