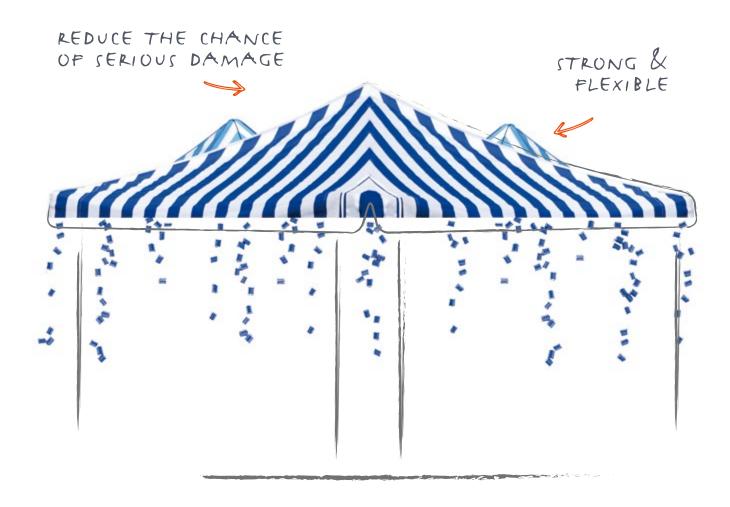
# ANTIFLAME films, tapes & fibers





PERFECT SOLUTION FOR YOUR PRODUCT AND APPLICATION



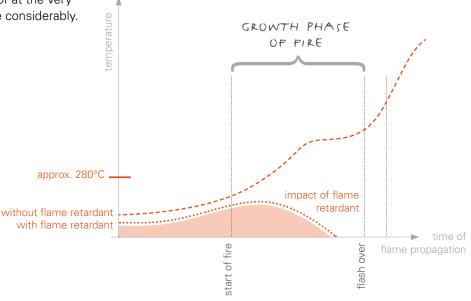


Plastic products require a special focus as they can be ignited by a short circuit, overheating, and other external influences resulting in a blazing fire within minutes. Flame retardants can inhibit, or at least delay, the combustion and spread of fire so that valuable time is gained to enable fire-fighting and evacuation measures to be carried out. This in turn, reduces the chance of serious damage to property or in extreme cases, injuries or the loss of life.

In order to start burning, the combination of a flammable material and the presence of oxygen are required. Our flame retardants work by using a chemical reaction to disrupt the interaction between the flammable material and oxygen. The chemical reaction is activated by heat. The products of this chemical reaction work both physically and chemically, to reduce the temperature of the flame and to cut off the oxygen supply. The result is effectively a suffocation of the fire that either extinguishes the fire completely, or at the very least, delays the spread of the fire considerably.

Flame retardants that are effective in the gas phase have proved popular due to their high efficiency even when used in low dosages. As a result, the host plastic experiences almost no mechanical or optical degradation and the processability remains virtually unaffected.





# Most important and widespread flammability standards for films, tapes & fibers are:

ASTM D 2863-00 Limited Oxygen Index , UL 94 VTM, DIN 4102 B1/B2 , EN ISO 11925-2 (Class E) and ISO 3795 in varying definitions and test set-ups, adapted to the respective requirements for the final article and its application.

GABRIEL-CHEMIE GROUP HAS OVER 40 YEARS OF EXPERIENCE in flame retardants and provides not only products, but also serves as your partner for application and technical support. We look forward to working with you to find the perfect solution for your product and application.

### **MAXITHEN PP7AA9290FR:**

- \_ For Polypropylen films, tapes and fibers
- Halogen-free formula
- For high transparent articles
- Low impact on mechanical properties of the polymers because FR is free from mineral components
- High processing safety thanks to high thermal stability and wide processing window, good dispersibility in the polymer melt
- Free of Antimony trioxide and halogen compounds – ecologically harmless
- \_ Compatible with inorganic fillers

# **MAXITHEN HP7AA8310FR**

- For Polyethylene films, tapes and monofilaments
- Halogen-free formula
- For high transparent articles
- Low impact on mechanical properties of the polymers because FR is free from mineral components
- High processing safety thanks to high thermal stability and wide processing window, good dispersibility in the polymer melt
- Free of Antimony trioxide and halogen compounds - ecologically harmless
- Compatible with inorganic fillers

### **MAXITHEN HP7AA1460FR**

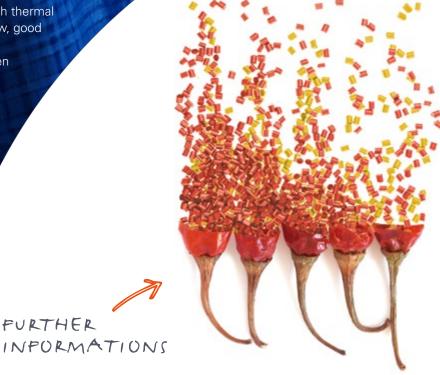
- For Polyethylene films (e.g. stretch-packaging)
- Halogen-free formula
- For high transparent articles
- Low impact on mechanical properties of the polymers because FR is free from mineral components
- Free of Antimony trioxide and halogen compounds - ecologically harmless

# **MAXITHEN HP73940FR**

- For Polyethylene films
- Chlorinated flame reatardant in combination with synergist Antimony trioxide in a classical formulation
- High flame retardancy at low dosage

### **MAXITHEN HP72521FR**

- For Polyolefine films, tapes and coatings
- Brominated flame reatardant in combination with synergist Antimony trioxide in a classical formulation
- High thermostability till 280°C
- High flame retardancy at low dosage





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