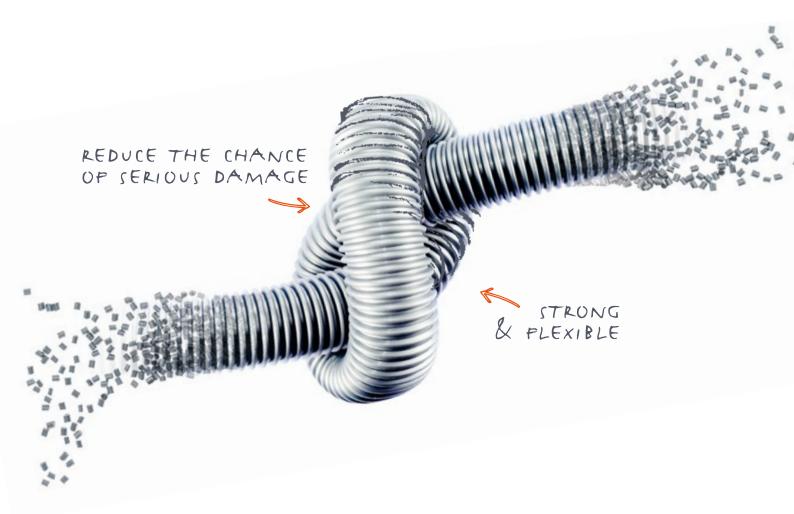
# ANTIFLAME electrical installation materials





PERFECT SOLUTION FOR YOUR PRODUCT AND APPLICATION

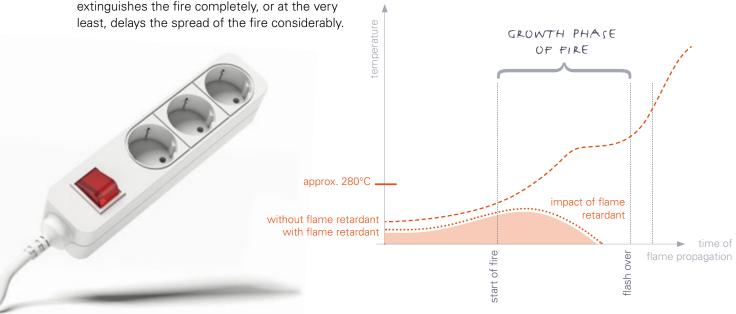


## ANTIFLAME E-MATERIALS

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 are:

UL 94 V and HB, "glow wire test" (IEC), SBI ("Single Burning Item"), Cone Calorimeter test, LOI ("Limiting Oxygen Index"), BS ("British Standard"), ASTM ("American Standard Method"), ISO, EN, DIN, M, 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 PP7MA1477FR**

- \_ For polypropylen
- \_ Halogen-free flame retardant agent; halogenated catalyst in low dosage; products can still be declared as "halogen-free", depending on the legal ppm threshold values
- depending on the legal ppm threshold values (4%, 500 ppm Halogen).
- \_ High flame retardancy at low dosage Glow Wire at 960°C achieved with 4 % dosage, IEC 60335/4
- \_ Low impact on Mechanical Properties due to low dosage
- Low halogen and free of antimontrioxid ecologically harmless

If absolute halogen-free is required, we can also offer a appropriate solution on request (MAXITHEN PP7A9850FR)

#### **MAXITHEN HP78900FR**

- \_ For all polyolefines
- Brominated flame reatardant in combination with a synergist; antimontrioxid in classical formulation

#### **MAXITHEN HP7AA4390FR**

- For HDPE
- \_ Halogen free flame retardant
- \_Very low mechanical impact because free from mineral components
- \_ Free of antimontrioxid and halogen compound
- Ecologically harmless



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GABRIEL-CHEMIE Gesellschaft m. b. H.

Industriestraße 1

2352 Gumpoldskirchen

Austria

Tel. +43 2252 636 30 0

Fax +43 2252 627 25 0

info@gabriel-chemie.com

WWW.GABRIEL-CHEMIE.COM