

BSEF Position Paper on Commission Proposal for a Revision of the Construction Products Regulation (CPR)

Key messages:

- The Revision of the CPR needs to continue to consider fire safety of construction materials, given;
 - 1) The move towards Green Energy and EVs, and required energy storage applications in homes
 - 2) The increased use of plastics and flammable materials
 - 3) The proliferation of electronics
- Risks from electric failure resulting in ignition and fires should be added to inherent product safety risks to Annex I, Part C 1.1.
- Brominated flame retardants play a key role in contributing to the fire safety in buildings

Fire safety and Brominated flame retardants

The increased use of advanced materials and technologies in our daily live has transformed our homes offices and public spaces into practical, comfortable, more energy efficient and sustainable living environments that facilitate the high standard and quality of life we are all used to. At the same time, it has brought with it an increased risk of fire as the materials used can be highly flammable and therefore require special attention when it comes to fire safety.

Although the numbers have decreased considerably over the past decades, in the EU there still remain 5,000 people that lose their lives and 50,000 get injured by fire related incidents, according to conservative estimates¹. Additionally, fires have also extremely negative consequences on the environment through water consumption, damage and loss of materials and emissions of pollutants (CO, CO₂, soot, dioxins, PCB, PAHs, etc) formed because of the fire, into the environment.

Flame retardants are an essential contributor to fire safety, as they contribute to fire prevention by providing flame retardancy to a wide range of materials used in the construction, electric and electronic appliances, telecommunication, automotive and transport industry. Flame retardants also slow the spreading of fire and therefore result in extension of the time available for people to evacuate and emergency services to intervene, saving lives and limiting the damages caused by fire. The contribution is even more essential today, with growing aging population and more people living in apartment buildings.

Today's Brominated flame retardants (BFRs) are a best-in-class, versatile and diverse family of chemical additives designed to safely provide efficient fire safety solutions for a range of flammable materials. BFRs are used in products, including construction products, to improve their fire safety and ensure the applicable fire safety standards are met.

¹ <https://www.europeanfiresafetyalliance.org/our-focus/statistics>

Therefore, the Revision of the CPR needs to continue to consider fire safety of construction materials and standards assuring a high level of protection to be a key element of this legislation. High fire standards are fundamental for human and environmental safety, and it is essential that these standards are maintained and reinforced during the revision of the CPR, given:

1) The move towards Green Energy and EVs requires energy storage applications in homes

Moving towards sustainability and more green energy is going to require on-site energy storage systems. A new common home to batteries are Electric Vehicles (cars, electric bikes and motorcycles). New cars do not only run on stored electricity, but they can power your home when the local power plant is not operational. The batteries used for these applications may be prone to overheating or failure and hence are a reason why fire safety is key to ensure a safe transition to a decarbonized economy.

A considerable amount of fire incidents have occurred during the charging of a vehicle, which is parked in one's home garage or a public parking deck, resulting in not only the loss of the product but also the loss of the area in which it is housed. It is therefore fundamental that electric vehicles, home storage appliance and construction materials adhere to strict fire safety standards to save lives and protect properties and the environment.

2) The increased use of plastics and flammable materials

The increased use of plastics, composites, foams and synthetic fiber-based fillings are resulting in an increased risk of fire as many of these advanced materials can be highly flammable. Homes, offices and public spaces therefore require special attention when it comes to fire safety: considering the flammability of these materials, it is fundamental to reinforce fire safety standards to make sure that best available technologies are used to efficiently and effectively protect our buildings and their inhabitants against fire hazard.

3) The proliferation of electronics & risk of electric failures resulting in ignition and fires

Many buildings today contain electronics, and electrical faults pose risks to people. Due to the increasing proliferation of electrical devices used in smart homes and offices an explicit mentioning in the inherent product requirements is warranted.

Therefore, Annex I Part C (f) of the Commission proposal for a Revision of the CPR should be expanded from "risks of electrical failure" to "risks of electrical failure resulting in ignition and fires".

The BSEF view on improving fire safety in buildings

We agree with the Modern Building Alliance that fire safety in buildings should be improved alongside seven important dimensions: prevention, detection, early suppression, evacuation, compartmentation, structural safety and firefighting² and reflected in material and product standards.

Further information:

For further information, please contact Michael Hack, Secretary General (mhack@bsef.org) or Patrick Fox, Head of Public Affairs & Advocacy (pfox@bsef.org)

² <https://www.modernbuildingalliance.eu/EU-fire-safety-guide>



The International
Bromine Council

About BSEF

BSEF – the International Bromine Council, is the global representative body for bromine producers and producers of bromine technologies. Originally founded in 1997, BSEF works to foster knowledge on the societal benefits of bromine and its applications. The members of BSEF are Albemarle Corporation, ICL Industrial Products, Lanxess and Tosoh.