

October 1<sup>st</sup>, 2014

**Object: Furniture Fire Safety Regulations:**

Proposed changes to the UK's furniture flammability laws

<https://www.gov.uk/government/consultations/furniture-fire-safety-regulations-proposed-amendments>

pinfa brings together companies producing and using alternative flame retardants, based on phosphorus, inorganics and nitrogen (PIN flame retardants).

The studies carried out for BIS show that **the UK's Furniture Fire Safety Regulations are effective in saving lives and property**. We support the objective fixed for the proposed changes of **not compromising this level of fire safety** whilst enabling more flexible approaches.

We would suggest that use of PIN flame retardants can contribute to this objective and to resolving concerns cited in this consultation *"about the actual, potential and perceived negative effects of some brominated flame retardants on health and the environment"*. **Such concerns about certain flame retardants' safety should be addressed as a function of their specific properties.**

In particular, **total flame retardant loading is not indicative of environmental or health impact**, so that the indicated objective of *"a reduction of up to 50%"* (of flame retardants used) is not appropriate, and should be replaced by specific objectives to reduce or substitute chemicals which are the object of the expressed concerns. **Simply reducing total flame retardant use is not generally compatible with ensuring that fire safety is maintained.**

Concerning the specific proposals outlined in the referenced document, we support the general idea that **materials could be tested in combination (filling plus covering)**, allowing furniture manufacturers flexibility to optimize flame retardant use where it is most efficient (in terms of product safety and cost) in a given materials combination: in the foam, in the covering textile, or some balance of both. However **it is important to ensure that this does not result in a reduction in fire safety for the public.**

We support the proposal to modify the small flame test for fabrics, to **test all fabrics over flame retardant foam but with a flammable, air-containing layer between the fabric and the foam**, in order to simulate the real-life situation of furniture in use where fabrics cannot over time be guaranteed to remain always closely held to foams without air being able to enter and feed a possible fire.

**We also support the maintaining of the specific fire testing for foams, as this is an essential part of reducing the fire dangers of upholstered furniture** (heat release test for foams). Furniture fire dangers are related both to the risk of ignition of furniture as the first burning item and to the fuel contribution of the furniture to fires starting in other items, where non fire safety treated furniture foam can provide a fire load leading rapidly to flashover and significantly increasing the risk for inhabitants of not escaping and the dangers for firefighters. Any move to fire protection based on FR textiles and interliners, without FR treatment of foams and fillings, could lead to a significant increase in fatalities and damage relating to fires starting in other items in the house (e.g. electronics, lithium ion batteries, placed on or near upholstered furniture).

We welcome that the **use of protective (fire-resistant) interliners** is taken into account as one option for achieving fire safety, including in combination with flame retardant filling materials.

We welcome that **currently non regulated materials are taken into account and tested** (e.g. non-foam fillings, structural materials, non visible textiles ...) because this should increase fire safety.

On the question of cigarette vs. match (small flame) test, **we would agree that where a small flame test is required, then an additional smoldering cigarette test should not generally be required.** Although there may be some materials which pose a fire risk with a smoldering cigarette but resist a small flame, these are unusual, so that the additional testing does not appear to be justified for most materials. Specific requirements should be defined if materials are identified which pose fire risks with smoldering cigarettes.

We wish to express concern that the results from standardised testing of mock-up foam/liner/fabric items may not correspond to furniture behaviour in fire. To assess this, **comparative testing between different labs (round Robin) and comparison between item tests and full scale fire tests should be carried out.**

We hope that these comments will be helpful and remain at your disposition for any further question and exchange with you.

Best regards,

*Redacted*

For further enquiries, please contact:

*Redacted*

About pinfa: Pinfa is the Phosphorus, Inorganic and Nitrogen Flame Retardants Association and is a Sector Group within Cefic, the European Chemical Industry Council. pinfa represents the manufacturers and users of non-halogenated phosphorus, inorganic and nitrogen flame retardants (PIN FRs). [www.pinfa.org](http://www.pinfa.org)