The Alliance for
FLAME RETARDANT
FREE FURNITURE

Joint position: The Alliance for Flame Retardant Free Furniture welcomes the US law mandating nationwide compliance with California's flammability standard for upholstered furniture and calls for harmonising flammability requirements for furniture in Europe via upcoming Sustainable Products Initiative

Brussels, 8 June 2021 – The Alliance for Flame Free Furniture welcomes the 'COVID-19 Regulatory Relief and Work from Home Safety Act' passed by the United States congress and signed into law on December 27, 2020[1], requiring that all upholstered seating for furniture imported or sold in the US comply with the flammability test specified by the California Technical Bulletin 117-2013 (TB 117 – 2013), a smoulder test.

The Alliance calls on the EU institutions and Member States to adopt a similar approach towards harmonising existing flammability standards and requirements across Europe, using smoulder ignition tests (such as cigarette test EN 1021/1) instead of open flame tests as a basis to prove compliance, whenever flammability requirements are already in place at national level. The upcoming Sustainable Products Initiative (SPI) and implementing legislation should be the framework for combining fire safety, chemical safety and circularity objectives.

The US Business and Institutional Manufacturers Association, BIFMA, supports the above-mentioned US legislation, together with a broad coalition led by the American Home Furnishings Alliance (AHFA). For many years, the members of BIFMA worked to repeal California TB133 (open flame) and promote California TB 117-2013.[2] TB 117-2013 provides fire safety protection against smouldering sources, which prior to the TB 117-2013 adoption were the leading ignition sources of furniture fires and associated losses[3][4]. In the US, several sources alerted over several years of the negative effects of toxic flame retardants, including the Chicago Tribune[5] and several NGOs and authors.[6][7][8]

On the European side, the Alliance for Flame Retardant Free Furniture has been advocating for years for a harmonisation of existing flammability standards and requirements at EU/European level and for the wide introduction of compliance with smoulder ignition tests[9] as opposed to open flame tests.

Open flame tests have led to an intensive use of chemical flame retardants. This type of tests has not been shown to provide a meaningful fire safety benefit.[10] In a real furniture fire, once the fabric ignites, the flames grow so large that flame retardants added to the foam become ineffective. With outdated fire safety requirements in several European countries, efforts to phase out hazardous chemical flame retardants are being counteracted. Currently, for domestic furniture, compliance with open flame tests is required in the United Kingdom[11] and Ireland[12]. Other European countries require compliance with the cigarette test (EN 1021/1) and others do not have requirements in place at all. Compliance with open flame tests is often also requested in the public and contract market throughout Europe, including in many public tenders. In some situations, performance requirements are established either by law or by technical standards (for instance the EN 1021 standards have pass/fail criteria), in others they are decided on a case-by-case approach, based on specific considerations involving the whole building and other envisaged fire prevention

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[1] Omnibus Spending Bill (2020) (last item) (link).
[2] BIFMA press release (2020) (link).
[3] California Department of Consumer Affairs, Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (2018). Final statement of reasons for Amendment to Flammability Standards (link).
[4] See also the abovementioned Bureau's flammability standards regulatory packages (link).
[5] http://media.apps.chicagotribune.com/flames/index.html
[6] Charbonnet, J., Weber, R., & Blum, A., (2020). Flammability standards for furniture, building insulation and electronics: Benefit and risk (link).
[7] Rodgers, K.M., L.R. Swetschinski, R.E. Dodson, H.R. Alpert, J.M. Fleming, and R.A. Rudel (2019). Health toll from open flame and cigarette-started fires on flame-retardant furniture in Massachusetts, 2003–2016. American Journal of Public Health (link).
[8] US Consumer Product Safety Commission, Organohalogen Flame Retardants Petition (link).
[9] https://safefurniture.eu/solution/
[10] https://www.chicagotribune.com/investigations/ct-met-flames-science-20120509-story.html
[11] 1988 Furniture (Fire Safety) Regulations and BS 5852 standard
[12] Furniture Fire Regulations and standard IS 419:2011

measures. This second case may actually be prevailing. A harmonisation of flammability standards and requirements is needed at European level to avoid compliance with open flame tests, but rather with smoulder tests (compliance can be met without the use of flame retardants), whenever flammability requirements are already in place at national level.

Many flame retardants have been documented to have harmful effects and are of concern for human health, animals and the environment[13]. Many of these chemicals present a risk for workers - who are exposed during production, for consumers, as they migrate out of articles, and for people involved in end-of-life processing. Infants, children and adults are exposed to them via multiple pathways and small children are more vulnerable than adults. Chemicals in products and in buildings have an effect on indoor air quality that needs to be addressed. There is also evidence that flame retardants also increase fire smoke and toxicity[14] [15], leading to the inability of firefighters to safely enter, find and put out the fire, putting fire safety at risk, but also their lives as well as of occupants. In addition, there is no clear evidence of the benefits of the use of flame retardants in terms of fire safety.[16]

Toxic chemical flame retardants are also not compatible with circular design principles and their use counteracts circularity and circular loops that are promoted by furniture manufacturers, such as reuse, refurbishment, remanufacturing and recycling. The use of these chemicals jeopardises the transition of the furniture industries to a more circular economy[17], a sector that has potential for becoming more circular as identified by the European Commission's new Circular Economy Action Plan, where furniture was identified as a priority product group to address[18].

While there are several alternative solutions to ensure fire safety that do not pose a problem for health and the environment[19], the right regulatory environment supported by standards is needed for appropriate fire-safety measures and for **supporting circular furniture design principles**. For a long-term sustainable approach, new materials which are much less flammable and 'fire toxic' than those currently used will need to be market ready. But even with these solutions, many companies simply cannot meet decades-old large open flame testing methods in specific countries without the use of chemical flame retardants.

This Alliance wants to ensure that legislation and requirements in all markets balance three aspects: Fire Safety, Chemical Safety and Circularity. With the upcoming Sustainable Products Initiative, the European institutions and Member States have the perfect opportunity and framework for delivering to this objective, by linking a smoulder ignition test to the upcoming Directive or implementing measures, introducing EN 1021/1 as a reference standard for compliance with flammability requirements, whenever these are in place at national level. This will not only reduce exposure to harmful chemicals but also boost the potential of the European furniture industries of transitioning to a more circular economy.

Co-signatories and Alliance members

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[13] https://safefurniture.eu/resources/studies/

[14] Sean McKenna, Robert Birtles, Kathryn Dickens, Richard Walker, Michael Spearpoint, Anna A Stec and T Richard Hull (2017). Flame retardants in UK furniture increase smoke toxicity more than they reduce fire growth rate (link).

[15] Anna A Stec (2017). Fire toxicity - the Elephant in the Room? (link).

[16] https://safefurniture.eu/issues/fire-safety/

[17] Revision of the EU Green Public Procurement (GPP) criteria for Furniture (2017), page 118 (link).

[18] A new Circular Economy Action Plan For a cleaner and more competitive Europe - COM/2020/98 final (link).

[19] https://safefurniture.eu/solution/