

BSEF position on the appropriate low POP content limit for Deca-BDE

BSEF supports a low POP limit of 1000mg/kg

BSEF believes that the most appropriate **low POP content limit for Deca-BDE is 1000 mg/kg**.

A key reason for this limit is that the typical concentration of Deca-BDE in waste articles is above that threshold (1-20% by weight)¹. A limit of 1000 mg/kg would therefore capture all waste that has been flame retarded with Deca-BDE and ensure the destruction of such waste in an environmentally sound manner as specified in the Basel Technical Guidelines on POPs Waste. At the same time, it would allow the cost-effective identification and subsequent recycling of other materials not containing DecaBDE.

Furthermore, there is currently no quick screening technology for detecting brominated flame retardants in articles. The main method currently suggested for detecting bromine in articles, especially in plastics, is XRF (X-Ray Fluorescence) screening. XRF is applicable to a wide range of concentrations, between 500 and 1000 parts per million (ppm) and is not validated for concentrations below 1000 ppm. Adopting any limits lower than 1000 mg/kg would therefore be difficult to implement in practice by actors in the waste management sector, as it would require analytical capacity that is currently not widely available. It is important to note that XRF only identifies bromine and cannot detect a specific substance. Therefore, this method is not an appropriate tool for detecting the presence of POP listed substances.

BSEF supports a separate low POP limit for Deca-BDE

BSEF believes that **a low POP limit established for Deca-BDE should be separate from the limit for penta-BDE and octa-BDE**.

Deca-BDE is found in different and much more varied waste streams than Penta-BDE or Octa-BDE. Deca-BDE has been used in plastics/polymers/composites, textiles, adhesives, sealants, coatings and inks, while for example Penta-BDE was mostly used in polyurethane foam (PUR) foams and phenolic resin papers (PWBoards). 1

¹ Risk profile on decabromodiphenyl ether (commercial mixture, c-decaBDE); UNEP/POPS/POPRC.10/10/Add.2, p.9



The International
Bromine Council

About BSEF

BSEF aisbl is the International Bromine Council². Since 1997, the organisation has been working to foster knowledge on the uses and benefits of bromine-based solutions. BSEF strongly believe in science and innovation. Through investments in research and development BSEF members create robust bromine-based technologies meeting the needs of society. Our members include Albemarle Corporation, ICL Industrial Products, Lanxess and Tosoh Corporation.

² <http://bsef.com/>