

Fact-sheet – HBCD in PS Foam

October 22nd, 2008

Name	Hexabromocyclododecane (HBCD)
CAS number	25637-99-4 and 3194-55-6
EINECS number	247-148-4 and 221-695-9
What is HBCD?	HBCD is a brominated flame retardant used as an additive. HBCD is referred to as HBCDD by the European Authorities.
Where is it used?	HBCD is used as a flame retardant mainly in Expanded and Extruded Polystyrene (EPS and XPS) for thermal insulation foams, in building and construction. EPS and XPS insulation foams play a key contribution in helping to meet global, regional and national energy efficiency targets.
Why is it used?	HBCD is essential to meet required high fire safety standards and protect human lives and property from fire. HBCD currently has no technically and commercially feasible alternative for EPS and XPS applications, despite intensive research, which the industry is committed to continue.
Is it safe?	HBCD has undergone a thorough EU scientific assessment to identify potential risks for human health and environment. Human Health and consumers The conclusions of this scientific assessment identified no risk to consumers. HBCD is not classified as a human carcinogen, mutagen or reprotoxic. Environment HBCD has been confirmed as a Substance of Very High Concern due to its impact on the environment linked to its Persistent, Bioaccumulative and Toxic (PBT) properties. The concerns surrounding HBCD are related to its toxicity in the aquatic environment and the degree to which it bioaccumulates and will persist in such an environment. The flame retardant is fully retained in the polymer matrix and as such does not represent a risk to the environment during the service life and at the end of the life of the product.
Why is HBCD on the REACH Candidate List?	Substances are placed on the Candidate List for Authorisation based on their potential to cause harm (their hazard) rather than on any actual risk they may pose. HBCD has been included in the candidate list due to its PBT properties. The European HBCD industry is cooperating closely with all the relevant European authorities to reduce the risks identified for the environment. HBCD emissions management programmes In this respect, Industry has also made extensive efforts to control HBCD emissions to the environment and implemented since 2006 voluntary emissions management programmes – SECURE and VECAP (see web-link below). In addition, and complementary to these programmes, Industry is following closely HBCD levels in the environment through an extensive 10-year monitoring programme. This programme should provide reliable information on trends of environmental concentrations and how they can be linked to the above mentioned emissions management programmes.
Does the presence of HBCD on the REACH Candidate list impact the market now?	No. The presence of HBCD on the REACH candidate list does not have any direct short or medium term legal impact on the manufacturing and marketing of EPS and XPS Foams. In particular, the listing does not entail any restriction to the manufacturing, handling, sales or use of EPS and XPS Foam boards. Should HBCD be confirmed as a priority substance for Authorisation under REACH (priority list to be published on 1st June 2009), the earliest final decision impacting the market is not expected to enter into force before 2012 at the earliest.
Where can I find more information?	www.ebfrip.org www.vecap.info (information on SECURE and VECAP)