

Organotin compounds in consumer Products

Updated BfR Opinion Nr. 034/2011, 2 August 2011*

Chemical substances in which organic groups are bound to tin (organotin compounds) are relevant in industrial manufacturing processes. Thus, monoorganotin and diorganotin compounds are used as heat and light stabilisers in the production of polyvinylchloride (PVC). Some compounds are also authorised as stabilisers in the production of plastics with food contact. Diorganotin and triorganotin compounds, on the other hand, have also been used in plant protection products or biocide products.

The number and ratio of organic and inorganic groups bound to tin considerably effect the compound's physiochemical properties as well as its biological effects. It is therefore necessary to differentiate between individual compounds within this substance category when assessing potential health hazards.

In the following Opinion, the Federal Institute for Risk Assessment (BfR) provides an overview of organotin compounds and their toxic effects as well as regulatory limits and reference values for these compounds.

The full version of this BfR Opinion is available in German on http://www.bfr.bund.de/cm/343/organozinnverbindungen_in_verbrauchernahen_produkten.pdf

* This updated Opinion replaces BfR Opinion Nr. 026/2011, 14 July 2011