

POPs Chemicals

Tetrabromodiphenyl ether and pentabromodiphenyl ether

CAS No. 5436-43-1; 60348-60-9

Full Name: Tetrabromodiphenyl ether and pentabromodiphenyl ether

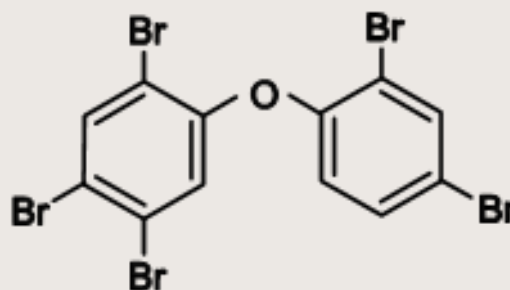
Trade Name: Commercial pentabromodiphenyl ether; c-pentaBDE

Uses: Commercial pentabromodiphenyl ether (c-pentaBDE) is a mixture of brominated flame retardants (BFRs), mainly isomers of pentabromodiphenyl ether and tetrabromodiphenyl ether. Brominated flame retardants are a group of brominated organic substances that inhibit or suppress combustion in organic material. C-pentaBDE is or has been used almost exclusively in the manufacture of flexible polyurethane (PUR) foam for furniture and upholstery in homes and vehicles, packaging, and non-foamed PUR in casings and electronic equipment (EE). They are also used to some extent in specialized applications in textiles and in industry.

Stockholm Convention: Pentabromodiphenyl ether and tetrabromodiphenyl ether are listed in Annex A to the Stockholm Convention with specific exemptions for recycling of articles that contain or may contain those substances. This specific exemption will expire at the latest in 2030 (decision SC-4/18).

Hazards and risks to human health and the environment:

Commercial mixture of pentaBDE is highly persistent in the environment, bioaccumulative and has a high potential for long-range environmental transport. These chemicals have been detected in humans in all regions. Concentrations in wildlife and in humans have also increased significantly. They thus represent a potential risk for future generations.



Reference

1. Risk profile on commercial pentabromodiphenyl ether. Persistent Organic Pollutants Review Committee 2006; UNEP/POPS/POPRC.2/17/Add.1
2. Risk management evaluation for commercial pentabromodiphenyl ether. Persistent Organic Pollutants Review Committee 2007; UNEP/POPS/POPRC.3/20/Add.1



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STOCKHOLM CONVENTION

