

POPs Chemicals

Decabromodiphenyl ether (Commercial mixture, c-decaBDE)

CAS No. 1163-19-5

HS Code: 29093038

Full Name: Decabromodiphenyl ether

Trade Name:

DE-83R, DE-83, Bromkal 82-ODE, Bromkal 70-5, Saytex 102 E, FR1210, Flamecut 110R. FR-300-BA, which was produced in the 1970s, is no longer commercially available (ECA, 2010).

Synonyms:

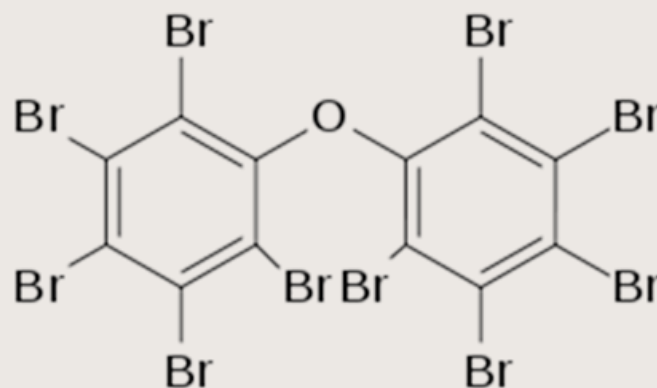
decabromodiphenyl ether; decabromodiphenyl oxide; bis (pentabromophenyl) oxide; decabromo biphenyl oxide; decabromo phenoxybenzene; benzene 1; 1' oxybis[2]; decabromo derivative; decaBDE; DBDPE; DBBE; DBBO; DBDPO

Uses:

Decabromodiphenyl ether (DecaBDE) has been mainly used as an additive flame retardant combining with the material where it is used to inhibit the ignition and slow the rate where flames spread. It has a wide range of applications including in plastics, polymers, composites, textiles, adhesives, sealants, coatings and inks. DecaBDE containing plastics are used in housings of computers and TVs, wires and cables, pipes and carpets. Moreover, it is also used in commercial textiles, mainly for public buildings and transport, and in textiles for domestic furniture.

Hazards and Risks to human health and the environment:

DecaBDE is highly persistent, has a high potential for bioaccumulation and food-web biomagnifications, as well as for long-range transport. DecaBDE can affect reproductive and nervous system as an endocrine disruptor.



Reference

1. Risk profile on decabromodiphenyl ether (commercial mixture, c-decaBDE). Persistent Organic Pollutants Review Committee. 2014; UNEP/POPS/POPRC.10/10/Add.2
2. Risk management evaluation on decabromodiphenyl ether (commercial mixture, c-decaBDE). Persistent Organic Pollutants Review Committee. 2015; UNEP/POPS/POPRC.11/10/Add.1
3. Assessment of additional information on decabromodiphenyl ether (commercial mixture, c-decaBDE) for the further defining of some critical spare parts in the automotive and aerospace industries and on its use in textiles in developing countries. Persistent Organic Pollutants Review Committee. 2016; UNEP/POPS/POPRC.12/11/Add.4
4. Environment and Climate Change Canada. Human Health State of the Science Report on Decabromodiphenyl Ether (decaBDE). Environment and Climate Change Canada. 2012. (<http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=92D49BA9-1>, accessed 16 June)

Secretariat of the Basel, Rotterdam and Stockholm Conventions

11-13, Chemin des Anémones

1219 Châtelaine, Switzerland

Tel: +41 22 917 8271

Email: brs@brsmeas.org

Website: www.pops.int

