

CAS No. 68631-49-2; 207122-15-4; 446255-22-7; 207122-16-5

**Full Name:** Hexabromodiphenyl ether; heptabromodiphenyl ether

Trade Name: Commercial octabromodiphenyl ether; c-octaBDE

**Uses:** Hexabromodiphenyl ether and heptabromodiphenyl ether are the main components of commercial octabromodiphenyl ether i.e. c-octaBDE.

c-octaBDE has been used as an additive flame retardant mainly in the plastics industry for polymers used for housings of equipment containing electronics. The estimated annual world-wide production of c-octaBDE in 1994 was 6,000 tonnes which decreased to 3,800 tonnes by 2001. Globally 70% of c-octaBDE has been used in acrylonitrilebutadiene styrene (ABS). Other minor uses include high impact polystyrene (HIPS), polybutylene terephthalate (PBT) and polyamide polymers.

**Stockholm Convention:** Hexabromodiphenyl ether and heptabromodiphenyl 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-4/14).

Hazards and risks to human health and the environment:

Levels of certain hexa- and heptabromodiphenyl ether components of the c-octaBDE are detected in the environment. These have toxic properties and have been shown to be persistent and bioaccumulative.

These chemicals are likely, as a result of long-range environmental transport, to lead to significant adverse human health and/or environmental effects such that global action is warranted.

## Reference

- Risk profile on commercial octabromodiphenyl ether. Persistent Organic Pollutants Review Committee 2007; UNEP/POPS/POPRC.3/20/Add.6
- Risk management evaluation for commercial octabromodiphenyl ether. Persistent Organic Pollutants Review Committee 2008; UNEP/POPS/POPRC.4/15/Add.1







Website: www.pops.int