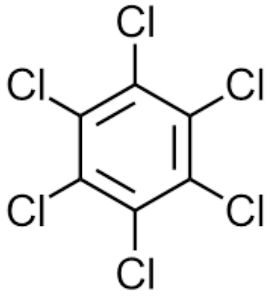
CAS 118-74-1

Hexachlorobenzene (HCB)

C_6Cl_6

VERMONT DEPARTMENT OF HEALTH



Summary of Possible Health Effects

Hexachlorobenzene (HCB) can affect how babies develop. It can also cause cancer and affect the way hormones act in the bodies of animals.

How is HCB used?

HCB was used from the 1930s to the 1970s in the U.S. as a fungicide. The Environmental Protection Agency (EPA) cancelled its use as a fungicide in 1984.[1]

Toxicity: What are its possible health effects?

HCB has been classified as possibly carcinogenic to humans by the International Agency for Research on Cancer.[2] The National Toxicology Program determined that HCB is reasonably anticipated to be a carcinogen.[3] The State of California has listed HCB as a developmental toxicant on the Proposition 65 list.[4] HCB is on the European Union's list of substances with documented endocrine-disrupting effects.[5]

HCB has been identified in the EPA's Urban Air Toxics Strategy as one of 33 hazardous air pollutants that present the greatest threat to public health in urban areas.[6]

Exposure: How can a person come in contact with it?

A person can come in contact with HCB by breathing in contaminated air or dust, drinking contaminated water, eating contaminated food, such as fatty fish, or from skin contact.[7]

HCB is a Persistent Bioaccumulative and Toxic (PBT) chemical that bioaccumulates (adds up) in the fat cells of the body.[5]

From 1955 to 1959, there was an incident where people were poisoned from eating HCB-treated grains and experienced many negative health effects. Effects included skin lesions, skin darkening, scarring of the face and hands, enlarged thyroid, and enlarged liver.[7,8] Follow-up studies of people who were children during this four-year exposure period indicated that children and infants had more sensitivity to the effects of HCB than adults.[7,8]

The National Health and Nutrition Examination Survey (NHANES) 1999-2000 and 2001-2002 U.S. blood sample data show that the concentration of HCB in the body increases with age, demonstrating its bioaccumulative capability.[1]

References

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