Pentachlorobenzene



C₆HCl₅

Summary of Health Effects

Pentachlorobenzene can interfere with how hormones are made and how they work in the bodies of animals.

How is pentachlorobenzene used?

Pentachlorobenzene has been used as a pesticide, fungicide and flame retardant.¹ It also may be produced during manufacturing processes or as a contaminant of pesticides.²

Toxicity: What are its health effects?

In a National Toxicology Program study on rats and mice, the kidney, liver and thyroid gland were the organs most affected by pentachlorobenzene.³

The European Union classified pentachlorobenzene as a category 1 endocrine disruptor.⁴ When pentachlorobenzene breaks down into pentachlorophenol in the body, it disturbs the self-regulating processes of retinoid and thyroid hormones in rats.³

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

A person can come in contact with pentachlorobenzene by breathing in

contaminated air, eating contaminated food, drinking contaminated water, or from skin contact. 1,2

Pentachlorobenzene was used as a pesticide, fungicide, and as a flame retardant. Today, exposure may occur through its use as a chemical created during manufacturing processes, or as a contaminant in pesticides.

Pentachlorobenzene was placed on the Persistent Organic Pollutant (POP) list at the Stockholm Convention under Annex A and C, which means that parties must take measures to eliminate the production and use and reduce unintentional releases.¹

Pentachlorobenzene is listed on Washington state's list of Persistant Bioaccumulative Toxic's (PBT) (WAC 173-333-310).⁵

The 2014 National Health and Nutrition Examination Survey (NHANES) report did not include data for pentachlorobenzene.

References

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