# CAS 87-68-3 Hexachlorobutadiene (HCBD) C4Cl6





## **Summary of Health Effects**

Hexachlorobutadiene (HCBD) may cause kidney cancer in humans based on evidence from animal studies.

#### How is HCBD used?

HCBD is typically used to make rubber compounds, chlorofluorocarbons and lubricants.<sup>1,2</sup>

### Toxicity: What are its health effects?

HCBD is classified as a possible human carcinogen by the Environmental Protection Agency (EPA) based on the observation of kidney tumors in male and female rats.<sup>3</sup>

California EPA's Office of Environmental Health Hazard Assessment found evidence of carcinogenicity, based on the development of kidney tubular tumors in both male and female rats in a 2-year diet study.<sup>4</sup> Through animal studies, it has been determined that HCBD is broken down into more toxic compounds by the body, and some of these breakdown products have potential to remain in body fat for long periods of time.<sup>5</sup>

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

A person can come in contact with HCBD by breathing in contaminated air, drinking contaminated water, eating contaminated food, or from skin contact.<sup>1</sup>

HCBD is a Persistent, Bioaccumulative and Toxic (PBT) chemical.<sup>1,2</sup>

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

#### References

- U.S. Environmental Protection Agency, Technology Transfer Network (2000). Hazard summary for hexachlorobutadiene. Retrieved from www.epa.gov/sites/production/files/2016-09/documents/hexachlorobutadeine.pdf
- 2. Agency for Toxics Substances and Disease Registry (1994). *ATSDR Toxicological profile for hexachlorobutadiene*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from www.atsdr.cdc.gov/toxprofiles/tp42.pdf

- 3. U.S. Environmental Protection Agency (1991). *Integrated Risk Information System (IRIS) for hexachlorobutadiene*. Retrieved from <u>cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance\_nmbr=58</u>
- 4. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Reproductive and Cancer Hazard Assessment Section (2000). *Evidence on the carcinogenicity of 1,3-hexachlorobutadiene*. Retrieved from <u>oehha.ca.gov/media/downloads/proposition-65/chemicals/hcbd-final.pdf</u>
- 5. Agency for Toxic Substances and Disease Registry (1994). *ATSDR Public health statement: Hexachlorobutadiene*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services. Retrieved from <a href="http://www.atsdr.cdc.gov/phs/phs.asp?id=863&tid=168">www.atsdr.cdc.gov/phs/phs.asp?id=863&tid=168</a>