

# 1,1,2,2-Tetrachloroethane (1,1,2,2-TCA)

C<sub>2</sub>H<sub>2</sub>Cl<sub>4</sub>

#### **Summary of Health Effects**

1,1,2,2-Tetrachloroethane (1,1,2,2-TCA) causes cancer in animals and may cause cancer in humans. 1,1,2,2-TCA can damage the liver, kidneys, nervous system and blood system in humans.

#### How is 1,1,2,2-TCA used?

In the past, 1,1,2,2-TCA was used in paint removers, varnishes, lacquers, in photographic films and as an industrial solvent. Its use has since decreased in the U.S and has been reportedly used to make other chemicals. 1

### **Toxicity: What are its health effects?**

1,1,2,2-TCA is included on California's Proposition 65 list as a carcinogen.<sup>2</sup>

The Environmental Protection Agency (EPA) determined that 1,1,2,2-TCA is likely to be carcinogenic to humans.<sup>3</sup>

Repeated exposures in animals and cases of accidental human exposure indicate that

1,1,2,2-TCA is toxic to the liver and kidneys. 1,1,2,2-TCA can also damage the nervous system and the hematological (blood) system.<sup>4</sup>

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

A person can come in contact with 1,1,2,2-TCA by breathing in contaminated air, drinking contaminated water, or from skin contact with the chemical.<sup>4</sup>

Populations with potentially greater exposure includes those who live near and/or work at hazardous waste sites and areas where 1,1,2,2-TCA is manufactured.<sup>4</sup>

Biomonitoring studies have been conducted; however, 1,1,2,2-TCA was not detected in the general U.S. population in 2003 to 2004.<sup>5</sup>

1,1,2,2-TCA 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.<sup>6</sup>

#### References

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