



# Chlorinated Tris

## [Tris(1,3-dichloro-2-propyl)phosphate, TDCPP, and TDCIPP] in Furniture Products

### Why am I being warned about potential exposure to chlorinated tris in furniture products?



- Tris(1,3-dichloro-2-propyl)phosphate (also known as chlorinated tris, TDCPP and TDCIPP) is on the [Proposition 65](#) list because it can cause cancer.
- Exposure to chlorinated tris may increase cancer risk.
- Proposition 65 requires businesses to determine if they must provide a warning about exposures to [listed chemicals](#).

### What is chlorinated tris?

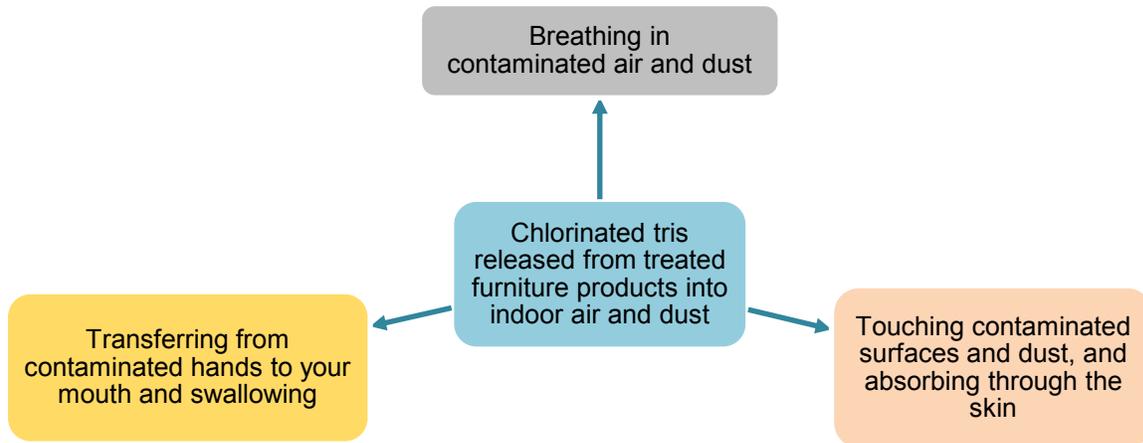
- Chlorinated tris is a chemical flame retardant. Adding flame retardants to furniture products is one way to reduce flammability.
  - ▶ Polyurethane foam treated with chlorinated tris may be used in upholstered furniture.
  - ▶ Textiles and plastic treated with chlorinated tris may be used in furniture products.

---

### How does exposure to chlorinated tris from furniture products occur?

- Chlorinated tris can be gradually released from treated furniture products into indoor environments, including houses, schools, day care centers, offices and cars.
- After chlorinated tris is released from furniture products, it is present on floors, furniture, and other surfaces and in air and dust.
- Young children may have higher exposure to chlorinated tris because:
  - ▶ It can be present in children's furniture products, such as nap mats, travel beds, bassinets, portable crib mattresses, and play pens; and
  - ▶ Infants and toddlers often crawl and play on the floor getting more dust on their hands and they often put their fingers, toys and other objects in their mouths.

## Main ways you can be exposed to chlorinated tris used in furniture products:



### How can I reduce my exposure to chlorinated tris from furniture products?

- ✓ Consider furniture products made with foam alternatives, such as cotton, wool, natural latex, or products made with untreated polyurethane foam.
- ✓ Look for children's furniture products that are labeled as not using flame retardants.
- ✓ For upholstered furniture, check the label commonly found underneath the seat cushion, and look for:
  - ▶ TB 117-2013 label ([Technical Bulletin 117-2013](#)) for furniture manufactured and sold in California beginning in January 2015: The label *must* indicate whether or not the product contains added flame retardants. Products with this label are *less likely* to have chlorinated tris.
  - ▶ TB 117 label ([Technical Bulletin 117](#)) for furniture manufactured and sold in California prior to 2015: The label *will not* indicate whether or not added flame retardants are present. Products with this label are *more likely* to have flame retardants such as chlorinated tris.
  - ▶ If you do not see a label, ask if flame retardants, and specifically chlorinated tris, have been added to the product.
- ✓ Replace upholstered furniture products that are torn or have crumbling foam.
- ✗ Avoid exposure to dust which can contain chlorinated tris:
  - ▶ Wash your and your child's hands frequently, especially before preparing food and eating.
  - ▶ Clean your floors regularly, using a wet mop if possible, or a vacuum with a high efficiency particulate air (HEPA) filter.
  - ▶ Dust regularly, using a damp cloth.

**For more information:****Chlorinated Tris in Furniture Products:**

- California Environmental Protection Agency (CalEPA)  
Department of Toxic Substances Control (DTSC)
  - ▶ Children's Foam-Padded Sleeping Products with TDCPP  
[https://www.dtsc.ca.gov/SCP/Foam\\_Padded\\_Sleeping.cfm](https://www.dtsc.ca.gov/SCP/Foam_Padded_Sleeping.cfm)
- State of California Department of Consumer Affairs (DCA)
  - ▶ Technical Bulletin 117-2013, Frequently Asked Questions:  
<http://www.bearhfti.ca.gov/industry/bulletin.shtml>

**Proposition 65:**

- California Environmental Protection Agency (CalEPA)  
Office of Environmental Health Hazard Assessment (OEHHA)
  - ▶ Proposition 65: Background:  
<https://www.p65warnings.ca.gov/faq>
  - ▶ Proposition 65: The Chemical List:  
<https://www.p65warnings.ca.gov/chemicals>

**Scientific Information on Chlorinated Tris:**

- California Environmental Protection Agency (CalEPA)  
Office of Environmental Health Hazard Assessment (OEHHA)
    - ▶ Evidence on Carcinogenicity of Chlorinated Tris:  
<http://oehha.ca.gov/media/downloads/proposition-65/chemicals/tdcpp070811.pdf>
- Biomonitoring California
- ▶ Brominated and Chlorinated Organic Chemical Compounds Used as Flame Retardants:  
<http://www.biomonitoring.ca.gov/sites/default/files/downloads/120408flamedoc.pdf>