Chlorinated Tris

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

Why am I being warned about potential exposure to chlorinated tris?

- 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 exposure to listed chemicals.

What is chlorinated tris?

- Chlorinated tris is a chemical flame retardant. Adding flame retardants to products is one way to reduce flammability.

How does exposure to chlorinated tris occur?

- Chlorinated tris can be gradually released from treated products into indoor environments, including houses, schools, day care centers, offices, and cars. Sources include:
  - Polyurethane foam treated with chlorinated tris used in upholstered furniture, automotive products, carpet padding, and gymnastic equipment.
  - Some children’s products containing polyurethane foam or other treated materials, such as toys, strollers, car seats, nursing pillows, and sleeping products, including nap mats, sleep positioners, travel beds, bassinets, portable crib mattresses, and playpens.
  - Textile coatings containing chlorinated tris.
  - Camping tents treated with chlorinated tris.
- Once chlorinated tris is released from 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 many children’s products (see list above).
  - Infants and toddlers often crawl and play on the floor, getting more dust on their hands, and putting their fingers, toys, and other objects in their mouths.
Main ways you can be exposed to chlorinated tris:

Breathing in contaminated air and dust
Transferring from contaminated hands to your mouth and swallowing
Touching contaminated surfaces and dust, and absorbing through the skin

Chlorinated tris released from treated products into indoor air and dust

How can I reduce my exposure to chlorinated tris?

✔ Consider products made with foam alternatives, such as cotton, wool, natural latex, or products made with untreated polyurethane foam.

✔ Look for children’s 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, children’s products, and other foam products that are torn or have crumbling foam.

✔ If you install new carpet, avoid using padding made from recycled or scrap polyurethane foam.

✔ Minimize your exposure to dust, which can contain chlorinated tris.
  ▶ Wash your and your child’s hands frequently, especially before preparing food, and before eating.
  ▶ Clean your floors regularly, using a wet mop, or a vacuum cleaner with a high-efficiency particulate air (HEPA) filter, if possible.
  ▶ Wipe up dust regularly, using a damp cloth.
For more information:

**Chlorinated Tris in Products**
- California Environmental Protection Agency (CalEPA)
  Department of Toxic Substances Control (DTSC)
  - Effective July 1, 2017: Children's Foam-Padded Sleeping Products with TDCPP or TCEP as a Priority Product
    https://dtsc.ca.gov/scp/childrens-foam-padded-sleeping-products-with-tdcpp-or-tcep/

**Chlorinated Tris in Furniture Products**
- California Department of Consumer Affairs (DCA)
  - Technical Bulletin 117-2013

**Scientific Information on Chlorinated Tris**
- California Environmental Protection Agency (CalEPA)
  Office of Environmental Health Hazard Assessment (OEHHA)
  - Evidence on the Carcinogenicity of Chlorinated Tris
  - Tris(2-chloroethyl) phosphate (TCEP)
    https://biomonitoring.ca.gov/chemicals/tris2-chloroethyl-phosphate-tcep

**Proposition 65**
- California Environmental Protection Agency (CalEPA)
  Office of Environmental Health Hazard Assessment (OEHHA)
  - Proposition 65: Background
    http://www.oehha.ca.gov/prop65/background/p65plain.html
  - Proposition 65: The List of Chemicals
    http://www.oehha.ca.gov/prop65/prop65_list/Newlist.html
  - Proposition 65: Fact Sheets
    https://www.p65warnings.ca.gov/fact-sheets