



Formaldehyde

Why am I being warned about potential exposure to formaldehyde?



- Formaldehyde (gas) is on the [Proposition 65](#) list as a chemical that causes cancer.
- Exposure to formaldehyde can cause leukemia and cancers of the nose, throat, and sinuses.
- Proposition 65 requires businesses to determine if they must provide a warning about exposures to [listed chemicals](#).

What is formaldehyde?

Formaldehyde is a colorless, flammable gas with a strong smell. It is released into the air from a variety of sources.

How does exposure to formaldehyde (gas) occur?

- Exposure occurs by breathing air that contains formaldehyde. Formaldehyde releases into the air from many sources.
 - ▶ **Some Furniture:** Made with formaldehyde-containing resins, paints, lacquers, and other coatings.
 - ▶ **[Composite Wood Products](#):** Particle board, plywood, and fiberboard are often made with formaldehyde-containing resins and are used in furniture, cabinets, shelves, doors, wall and [flooring materials](#).
 - ▶ **Building Materials and Certain Insulation Materials:** Foam and fiberglass insulation.
 - ▶ **Consumer Products:** Some hair smoothing and straightening products.
 - ▶ **Coatings for Some Furniture and Paper Products:** Paints, lacquers, and finishes.
 - ▶ **Permanent Press Fabrics:** Clothing, linens, upholstery, and draperies.
 - ▶ **Combustion Byproducts:** Fuel burning appliances such as gas stoves and kerosene space heaters, wood burning stoves, and car exhaust.
 - ▶ **Tobacco Smoke.**

Formaldehyde releases from products, combustion sources and tobacco smoke to air

People breathe contaminated air

How can I reduce my exposure to formaldehyde (gas)?

[Remove or reduce existing sources of formaldehyde](#) and avoid adding new sources.

- ✓ Choose products containing no formaldehyde; for example, those made with solid wood or stainless steel.
- ✓ Choose products containing little formaldehyde; for example:
 - ▶ “Exterior grade” pressed wood products made with phenol formaldehyde (PF) resin, which emit less formaldehyde than urea formaldehyde (UF) pressed wood products.
 - ▶ UF pressed wood products sealed with formaldehyde-free water-resistant coatings and finishes.
 - ▶ Products with California Air Resources Board (CARB) Phase 2 criteria labels, or, ultra-low-emitting formaldehyde (ULEF) or no-added formaldehyde (NAF) labels.
- ✓ Air out new furniture made from composite wood products containing formaldehyde, preferably away from the home and in a well-ventilated area. The area must have fresh air passing through it, or formaldehyde will not be removed.
 - ▶ Consider asking the manufacturer or store to leave the furniture unsealed in the warehouse for a few days before delivery.
- ✓ If items made from composite wood containing formaldehyde are the only available options, consider looking for *used* items, because release of formaldehyde gas from composite wood decreases over time.
- ✓ Apply a surface barrier (for example, latex-based paints or formaldehyde-free varnishes) onto formaldehyde-containing furniture and other furnishings (shelves, countertops, cabinets, and laminate flooring).
- ✓ Use formaldehyde-free insulation materials.
- ✓ Wash clothes, sheets, and other fabrics before use to reduce formaldehyde emissions.
- ✓ Assure adequate ventilation and open windows and doors regularly to bring in outdoor air.
- ✓ Increase ventilation during painting.
- ✓ Maintain low humidity and temperatures. More formaldehyde is released when it is hot and damp.
- ✓ Keep your fireplace and wood stove in good condition to prevent smoke from getting into your living environment.

- ⊗ Do not smoke. Do not allow children to breathe tobacco smoke.
- ⊗ Do not idle gasoline engines such as cars and other gasoline-powered equipment.
- ⊗ Do not use hair smoothing and straightening products that contain or release formaldehyde.
- ⊗ Avoid wood products made with urea formaldehyde (UF) resins that do not carry a California Air Resources Board (CARB) Phase 2 compliant label.

For more information:**General Formaldehyde Fact Sheets and Resources:**

- US Environmental Protection Agency (EPA)
 - ▶ Facts about Formaldehyde:
<http://www.epa.gov/formaldehyde/facts-about-formaldehyde#whatisformaldehyde>
- National Cancer Institute (NCI)
 - ▶ Formaldehyde and Cancer Risk:
<http://www.cancer.gov/cancertopics/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet>
- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ Final Report on the Identification of Formaldehyde as a Toxic Air Contaminant:
http://oehha.ca.gov/air/toxic_contaminants/html/Formaldehyde.htm

Formaldehyde in Products:

- California Environmental Protection Agency (CalEPA)
Air Resources Board (ARB)
 - ▶ Reducing your Exposure to Formaldehyde:
<http://www.arb.ca.gov/research/indoor/formaldehyde.htm>
 - ▶ Formaldehyde in the Home:
<http://www.arb.ca.gov/research/indoor/formaldgl08-04.pdf>
 - ▶ Composite Wood Products
http://www.arb.ca.gov/toxics/compwood/consumer_faq.pdf
 - ▶ Flooring Made with Composite Wood Products:
http://www.arb.ca.gov/html/fact_sheets/composite_wood_flooring_faq.pdf?utm_content=bufferdbfbf&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer
- California Department of Public Health
California Safe Cosmetics Program - Occupational Health Branch
 - ▶ Q&A: Brazilian Blowout & Other Hair Smoothing Salon Treatments
<http://www.cdph.ca.gov/programs/cosmetics/Documents/BrazilianBlowoutQA.pdf>
- New York State Department of Health, Center for Environmental Health
 - ▶ Consumer Health Alert: Hair Straightening Products and Formaldehyde
<https://www.health.ny.gov/environmental/chemicals/formaldehyde/docs/consumer.pdf>

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>