



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 significant exposure 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 is released into the air from many sources, including:
 - ▶ Some Furniture Products: Items made with formaldehyde-containing resins, paints, lacquers, and other coatings.
 - ▶ [Composite Wood Products](#): Particleboard, plywood, and fiberboard made with formaldehyde-containing resins, and used in furniture, cabinets, shelves, doors, and 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 vehicle exhaust.
 - ▶ [Tobacco Smoke](#) and [Cannabis \(Marijuana\) Smoke](#).

Formaldehyde is released from products, combustion sources, and tobacco smoke into the air

People breathe air that contains formaldehyde

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 Compliant labels, ultra-low-emitting formaldehyde (ULEF) labels, 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 the 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 the release of formaldehyde gas from composite wood decreases over time.
- ✓ Apply a surface barrier (for example, a latex-based paint or formaldehyde-free varnish) 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.
- ✓ Assure adequate ventilation inside your vehicle. Set the ventilation system to allow outside air to enter the vehicle, when possible.
- ✓ Increase ventilation during painting.
- ✓ Maintain low humidity and temperatures indoors. 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 and cannabis (marijuana) smoke.
- ⊗ Do not idle gasoline engines in vehicles 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 Fact Sheets and Resources**

- US Environmental Protection Agency (US EPA)
 - Facts About Formaldehyde
<https://www.epa.gov/formaldehyde/facts-about-formaldehyde#whatisformaldehyde>
- US Department of Health and Human Services (HHS)
National Institutes of Health (NIH)
 - Formaldehyde and Cancer Risk
<https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/formaldehyde/formaldehyde-fact-sheet>
- US Food and Drug Administration (FDA)
 - Hair Smoothing Products That Release Formaldehyde When Heated
<https://www.fda.gov/cosmetics/cosmetic-products/hair-smoothing-products-release-formaldehyde-when-heated>
- 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)
California Air Resources Board (CARB)
 - 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 (CDPH)
California Safe Cosmetics Program - Occupational Health Branch
 - ▶ Q&A: Brazilian Blowout & Other Hair Smoothing Salon Treatments
<https://www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/CSCP/CDPH%20Document%20Library/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 List of Chemicals
<https://www.p65warnings.ca.gov/chemicals>
 - ▶ Proposition 65: Fact Sheets
<https://www.p65warnings.ca.gov/fact-sheets>