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Facts About Formaldehyde

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What is formaldehyde?

Formaldehyde is a colorless, flammable gas at room temperature and has a strong odor. Exposure to formaldehyde may cause adverse health effects.

Where is formaldehyde found?

Formaldehyde is found in:

- Resins used in the manufacture of composite wood products (i.e., hardwood plywood, particleboard and medium-density fiberboard);
- Building materials and insulation;
- Household products such as glues, permanent press fabrics, paints and coatings, lacquers and finishes, and paper products;
- Preservatives used in some medicines, cosmetics and other consumer products such as dishwashing liquids and fabric softeners; and
 Fertilizers and pesticides
- Fertilizers and pesticides.

It is a byproduct of combustion and certain other natural processes, and so is also found in:

- Emissions from un-vented, fuel burning appliances, like gas stoves or kerosene space heaters; and
- Cigarette smoke.

Learn more from the Consumer Product Safety Commission about products that contain formaldehyde.

How can you be exposed to formaldehyde?

The primary way you can be exposed to formaldehyde is by breathing air containing off-gassed formaldehyde. Everyone is exposed to small amounts of formaldehyde in the air that has off-gassed from products, including composite wood products.

Learn how to protect yourself and your family from formaldehyde exposure.

What is EPA doing to protect against formaldehyde exposures?

- EPA finalized a regulation to set limits on how much formaldehyde can be released from composite wood products and establish a program in which independent certifying organizations will verify that composite wood panel producers comply with the limits on formaldehyde releases. Learn more.
- EPA is implementing and enforcing other statutes that pertain to formaldehyde.
- EPA conducts research to refine our understanding of what levels of exposure might affect human health.

Health effects of formaldehyde

Formaldehyde can cause irritation of the skin, eyes, nose, and throat. High levels of exposure may cause some types of cancers.

Learn more from the Agency for Toxic Substances and Disease Registry about the health effects of formaldehyde exposure.

EPA formaldehyde research and risk information

- Integrated Risk Information System (IRIS) toxicological profile for formaldehyde -- IRIS is a human health assessment database that contains information on health effects that may result from exposure to environmental contaminants.
- <u>Status of IRIS toxicological review of formaldehyde (inhalation)</u> -- EPA is currently revising its IRIS assessment of formaldehyde to address the 2011 National Academy of Sciences peer review recommendations. This assessment addresses both noncancer and cancer human health effects that are relevant to assessing the risks from chronic inhalation exposure to formaldehyde. When finalized, the updated toxicological profile for formaldehyde will appear in the IRIS database.
- <u>Acute exposure guideline levels (AEGLs) for formaldehyde (PDF)</u> (71 pp, 301 K, <u>About PDF</u>) -- AEGLs describe the human health effects to humans from once-in-a-lifetime, or rare, exposure to airborne chemicals. They are used by emergency responders when dealing with chemical spills or other catastrophic exposures.
- List of EPA research projects on formaldehyde in EPA's Science Inventory Database

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