Formaldehyde

Insulation Sector

Formaldehyde is a chemical used to bind together commercial fiberglass and mineral wool batt insulation.

How can this chemical affect my health?

Acute (Short Term) Effects
- Toxic to Humans & Animals - Can be fatal on contact, ingestion or inhalation for humans and other mammals.
- Irritates the Eyes – Can cause irritation or serious damage to the eye.
- Irritates the Skin – Can cause irritation or serious damage to the skin.

Chronic (Long Term) Effects
- Cancer – Can cause or increase the risk of cancer.
- Gene Damage – Can cause or increase the rate of mutations, which are changes in genetic material in cells.
- Asthma Trigger – Can result in high sensitivity so that small quantities trigger asthma, nose or sinus inflammation or other allergic reactions in the respiratory system.
- Sensitizes the Skin – Can lead to allergic reactions on the skin.
- Birth Defects – Can cause harm to the developing child including birth defects, low birth weight and biological or behavioral problems that appear as the child grows.
- PBT (Persistent Bioaccumulative Toxicant) – Does not break down readily from natural processes, accumulates in organisms concentrating as it moves up the food chain, and is harmful in small quantities.

What are safer alternatives?
- GOOD - Select a fiberglass/mineral wool insulation product with a GREENGUARD™ certificate so it has been tested and third-party certified to have no or minimal off-gassing of formaldehyde.
- BETTER - Select fiberglass/mineral wool products that use chemical or bio-based substitutes for formaldehyde.
- BEST - Consider other types of insulation, such as cellulose, cotton and natural wool.
Note: Typical exposure comes from off-gassing of the chemical, however, poorly installed fiberglass/mineral wool insulation or poor cleanup after installation could leave dust and fibers that may be a respiratory irritant as well.

Effects detailed above can occur at various stages of the product’s lifetime, not just during usage. All have been included to provide a complete picture of the chemical’s danger.