

Formaldehyde Regulation

Formaldehyde is an extensively regulated material. Mandatory government regulations set standards to protect human health and the environment. These standards help ensure the responsible use, production, storage, and handling of this important building block chemical.

Classification

In 1991, the U.S. Environmental Protection Agency (EPA) classified formaldehyde as a B1 “probable” carcinogen. This means that epidemiologic studies provide “sufficient” evidence of animal carcinogenicity, but “limited” evidence of human carcinogenicity. EPA is currently reviewing its classification in light of new research, including a major study that concluded that cancer risks were negligible at environmentally relevant levels of exposure.

The International Agency for Research on Cancer (IARC) currently classifies formaldehyde as a 2A “probable” carcinogen. Similar to EPA, this classification means that there is evidence of animal carcinogenicity, but limited evidence in humans. IARC classifications are advisory in nature. Regulatory agencies of individual governments take the classifications into consideration when formulating or implementing regulations. IARC is scheduled to revisit its formaldehyde classification this summer and will be reviewing recent research.

Worker Protection

The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) sets standards for workplace exposures to formaldehyde. These comprehensive health standards include permissible exposure levels, requirements for monitoring employee exposures in the workplace, protective measures including engineering controls, medical surveillance and hazard communication and training. OSHA has established a Permissible Exposure Level (PEL) of 0.75 parts per million (8-hour Time Weighted Average) and industry also uses appropriate labels/warnings to protect workers.

Levels of formaldehyde in the workplace have declined dramatically over the last several decades partly in response to advances in technology, improvements in industrial hygiene, and OSHA's workplace exposure limits. Like a lot of chemicals, improved manufacturing technology has resulted in lower emitting products. Employers have continued to improve industrial hygiene measures, and industry has also worked with OSHA and labor to set appropriate protective standards.

Consumer Protection

Three agencies— U.S. Environmental Protection Agency, Consumer Product Safety Commission (CPSC), and U.S. Department of Housing and Urban Development—have addressed indoor air formaldehyde exposure. Since industry voluntarily adopted product emission standards and low-emitting resins were developed, indoor formaldehyde emissions have declined significantly. The CPSC determined that independent CPSC action was superfluous given the voluntary actions and low levels of formaldehyde. The U.S. Department of Housing and Urban Development (HUD) sets standards that limit formaldehyde emissions from wood products for use in manufactured housing.