

# FORMALDEHYDE 101



## FACT SHEET



### What is formaldehyde?

Formaldehyde is a naturally occurring substance made of carbon, hydrogen and oxygen. It is an ever-present part of our world produced by every living organism – including humans – who make and process about 1.5 ounces of formaldehyde per person every day. It is a well-studied compound and, thanks to decades of innovation, has become a critical component used safely in everyday goods including automobiles/electric vehicles, wood products, medical devices, vaccines fertilizers, and antimicrobials.



### Is formaldehyde safe?

- Formaldehyde is created by every living system – from plants to animals to humans. It is broken down quickly and does not accumulate in the human body or the environment, plants, or animals.
- Formaldehyde is extensively regulated to protect human health and the environment. These regulations help support the safe production, storage, handling, and use of this important compound.
- Formaldehyde is one of the most well-studied chemicals in use today with 40 years of peer-reviewed studies supporting a safe level of formaldehyde exposure of these regulations.
- Formaldehyde manufacturers take their responsibility seriously, work with regulatory authorities, and provide information on the safe use of formaldehyde and the products made from it.



### How is formaldehyde used?

- Formaldehyde is used in the production of a wide variety of products like building materials that include residential construction applications, such as oriented strand board, plywood, and flooring. It is also used with medical devices and vehicles, as well as in agriculture and the aerospace industry. Despite being such an essential ingredient, little to no formaldehyde is present in most final products.
- For construction projects, formaldehyde-based resins enable the use of wood chips and scraps from harvested trees to make sustainable wood products. This allows almost the entire tree to be put to productive use, and these trees come from managed areas where they are regrown, enabling further capturing of carbon and continual replenishment.



### Is formaldehyde regulated?

Formaldehyde is extensively regulated to protect human health and the environment. Over 40 years of scientific studies by universities and independent scientists have been used by U.S. government agencies and international regulatory bodies to establish a safe level of formaldehyde exposure. There is no new scientific information that would indicate existing regulations are fundamentally flawed or insufficiently protective.



## To what extent is the U.S. planning to further regulate formaldehyde?

- The U.S. Environmental Protection Agency (EPA) recently released its 2022 draft IRIS assessment, in which it ignored dozens of studies published over the last 30 years finding little-to-no risk from low-level formaldehyde exposure. These studies were not considered and incorporated into the assessment, and the EPA has not responded to any of the key scientific and information quality critiques issued by the National Academy of Sciences (NASEM) when it last reviewed the assessment in 2011.
- The science shows there are defined safe thresholds for formaldehyde exposure.
- The initial draft formaldehyde IRIS assessment released in 2010 was widely criticized by the scientific community, including NASEM, for its lack of transparent, consistent scientific standards. The current EPA evaluation does not reflect NASEM's recommendations or attempt to resolve many of these valid critiques.
- Unachievable workplace standards based on EPA's IRIS values could be set well below levels of formaldehyde that exist in outdoor air, our homes, or background levels in nature. These levels are also orders of magnitude below current occupational standards in the U.S. and Europe. If adopted, these impractical and unnecessary guidelines will disrupt the production of many innovations reliant on formaldehyde – including wearable medical pumps, metered dose inhalers, Epinephrine autoinjectors, vaccines, vehicles, and sustainable wood products. This will compromise their quality and make them more expensive for consumers.

## Why is the IRIS assessment important?

- The 2022 IRIS assessment will be used by other EPA regulatory programs, including the Office of Pollution Prevention and Toxics' (OPPT) Toxic Substances Control Act (TSCA) risk evaluation, the Office of Pesticide Programs' (OPP) pesticide re-registration and the Office of Air and Radiation (OAR) as a baseline for future regulation on formaldehyde.
- IRIS has never been authorized by Congress, and its current approach is at odds with Congressional requirements for the Agency to use the best available science under the 2016 updates to the TSCA and other laws.