

Frequently Asked Questions about FF Insulation

There's formaldehyde in fiber glass insulation?

Glass fibers will not stick together unless they are glued or bound together. Formaldehyde has traditionally been used as one of several ingredients to make this kind of binder – an adhesive that holds fibers together allowing them to keep their shape and overall form. Fiber glass insulation is made by spraying a phenol-formaldehyde binder on the glass fibers. After being cured in an oven, the binder holds the fibers together.

Is formaldehyde required in the binder for fiber glass insulation?

If you had asked us this question ten years ago, we would have agreed with the rest of the industry and said “yes.” We would have said that formaldehyde is absolutely required to make fiber glass binder. But we've found a better way. As always, JM places the highest premium on innovation, so we're changing the way we do business.

Does formaldehyde contribute to fiber glass insulation product quality?

No. Formaldehyde itself does not contribute to insulation product quality, either thermal or acoustical.

What does formaldehyde-free mean?

Formaldehyde-free means that there is no formaldehyde used in the making of the binder for these products. The removal of formaldehyde means that there are no binder-related emissions of formaldehyde during the insulation manufacturing process, either to the outdoor environment or to the indoor working areas.

What is JM using in place of formaldehyde?

Johns Manville has partnered to design and create a revolutionary new binder composed of an acrylic resin, thus eliminating the need for phenol-formaldehyde binder.

Why did JM decide to switch away from the traditional phenol-formaldehyde binder for all its fiber glass building insulation products?

Quite simply, because it's just a smart thing to do. While there is no evidence to suggest that the level of formaldehyde released by traditionally bonded insulation is at all harmful, concern about indoor air quality has continued to be expressed by architects, specifiers, builders, and consumers. In addition, several state regulatory agencies warn that some people can develop a sensitivity to formaldehyde.

Is formaldehyde bad for me?

Formaldehyde is a colorless, pungent-smelling gas. High concentrations may trigger attacks in people with asthma. There is evidence that some people can develop sensitivity to formaldehyde. The International Agency for Research on Cancer (IARC) has classified formaldehyde as group 2A, i.e., a “probable human carcinogen” based on limited evidence of cancer in humans exposed to high levels in the air. Formaldehyde is also listed by the US National Toxicology Program as “reasonably anticipated to cause cancer.” However, the very low levels of formaldehyde potentially emitted from fiber

glass insulation products have not been shown to produce cancer or any other health effects.

Will my old, currently installed insulation made with a phenol-formaldehyde binder harm me?

No. Existing research on fiber glass insulation with phenol-formaldehyde-based binders suggests that the levels of formaldehyde that could potentially be released from a finished product are so low as to present essentially no risk. By selecting JM Formaldehyde-free insulation, consumers and builders can at least eliminate concerns over formaldehyde in their insulation. Rather than tell you that you should not worry, we simply decided to give you one less thing to worry about.

Are there federal regulations or lawsuits prompting the removal of formaldehyde?

Absolutely not. JM has chosen to create the JM Formaldehyde-free line of fiber glass insulation as proof of our commitment to innovation and to address indoor air quality concerns.

What is an acrylic resin binder?

The acrylic resin binder performs the same job as formaldehyde in traditional fiber glass products: it binds fiber glass together while providing the strength, durability and resiliency required by the insulation industry. Due to their low toxicity, acrylic materials are now used in a wide variety of building products, including paints and adhesives. The acrylic binder used by Johns Manville is related to these proven products.

Why is formaldehyde-free insulation white instead of yellow or other colors?

The conventional fiber glass products have a yellow color after the phenol-formaldehyde-based binders are oven cured. Some manufacturers may also dye products to give them a unique look. New JM Formaldehyde-free insulation does not contain phenol-formaldehyde-based binders or dyes, and is therefore naturally white.

Where can I learn more?

For more information on JM Formaldehyde-free insulation, visit the Johns Manville Web site at www.jm.com.

If I am a distributor or installer, should I be concerned about any increase in liability for the phenol formaldehyde-bonded product put in service over the years?

No. All the information and data we have demonstrates that the phenol formaldehyde-bonded fiber glass insulation is safe. We have sold more phenol formaldehyde-bonded fiber glass insulation than any one of our customers and we are confident that this is not a problem. We are also confident that the law of products liability encourages manufacturers, distributors and installers to move over time to those products and raw materials that allow even further reductions in potential hazards.

Was Johns Manville forced to make this change to an acrylic binder in order to meet US EPA hazardous air pollutant regulations?

Absolutely not. In fact, Johns Manville was already in compliance with these federal regulations even before the switch to the acrylic binder. This only makes sense because in moving to the acrylic binder Johns Manville has eliminated (through pollution prevention) all binder-related emissions of hazardous air pollutants—formaldehyde, phenol, and methanol.

I noticed that the new formaldehyde-free product is a bit softer to the touch than ordinary fiber glass. Do I still need to take precautions against irritation when working with it?

Yes. Some of our customers have told us that the formaldehyde-free product is softer or “friendlier” to the touch. This does not surprise us because we are using a formaldehyde-free acrylic binder. Nevertheless, you should take the same precautions against irritation you would take for ordinary fiber glass.