



Formaldehyde Off-Gassing Testing from Composite Wood Products

Recently, there has been an increased national awareness and growing concern for formaldehyde gas being released from manufactured laminated flooring and other composite wood products. The adhesives and sealants used in many of these products may contain formaldehyde and this formaldehyde vapor can off-gas from the finished product even after it has been installed in a home. Many of these products are safety-rated to European and/or California standards for formaldehyde off-gassing levels. However, recent investigations have shown that formaldehyde off-gassing can still be of a concern from some of these products. They can even be elevated above acceptable levels that they are listed as meeting. Formaldehyde gas is highly toxic and a confirmed human carcinogen. Even at lower exposure levels, formaldehyde gas can cause eye and nasal irritation, headaches and aggravate asthma conditions. EMSL Analytical, Inc. can assist you with formaldehyde testing and analyses to help you better evaluate the potential formaldehyde hazards from your composite wood products.

Installed Composite Wood Products – (ASTM D5582 - 14 Desiccator Method – EMSL Modified)

Provide EMSL with a 2 inch by 2 inch square piece of the composite wood product and place in a sealed plastic bag. At EMSL, each sample is placed into a glass vial and an air sample is collected from air passing over the flooring product. The air sample collected is evaluated to determine the parts per million (PPM) amount of formaldehyde off-gassing concentration in the air from the composite wood product.

Note: This testing cannot be used for CARB ATCM Phase II or European product compliance. This testing can show if detectable formaldehyde levels occur from your composite wood product and can be reviewed against current formaldehyde guidelines for air concentrations and off-gassing amounts.

Intact Laminate Flooring – (ASTM D6007 -14 Small Chamber Study – EMSL Modified)

Provide EMSL with an intact 2 foot by 2 foot square piece (no larger sizes please) of the composite wood product and wrap in plastic. Each sample is placed into small sample chamber by EMSL. After a 24-hour equilibration period, an air sample is collected from the chamber. This air sample is evaluated to determine concentration in PPM from formaldehyde off-gassing from the composite wood product as well as the formaldehyde emissions rate from the surface of the flooring ($\mu\text{g}/\text{m}^2\text{-hr}$).

Note: This testing cannot be used for CARB ATCM Phase II or European product compliance. This testing can show if detectable formaldehyde levels occur from your composite wood product and can be reviewed against current formaldehyde guidelines for air concentrations and off-gassing amounts.

Air Monitoring Badge to Determine Formaldehyde Levels (NIOSH Method 2016 – EMSL Modified)

EMSL will provide you with an easy-to-use passive room sampler (air monitoring badge) to measure the formaldehyde level in your home. Ideally, you can place a badge(s) in the room(s) where the laminated flooring products are installed and let it run for a 24-hour sampling period. After completion, return the used badge(s) to EMSL in the mailer provided and the lab can provide you with the formaldehyde concentration levels in PPM in your home.

Note: This testing cannot be used for OSHA, CARB, NIOSH, or EPA regulatory compliance. In addition other formaldehyde sources can be present such as household products, carpeting, furniture, and cabinetry that can contribute to the airborne formaldehyde levels. These test results can be used to establish if elevated formaldehyde levels exist in the room(s) tested.



Formaldehyde Testing Pricing Schedule

<i>Test Method</i>	<i>2 Week</i>	<i>1 Week</i>	<i>4 Day</i>	<i>3 Day</i>	<i>2 Day</i>	<i>1 Day</i>
ASTM D5582 -14 Desiccator Method - EMSL Modified	\$318	\$397	\$477	\$635	\$799	\$948
ASTM D6007-14 Small Chamber Study - EMSL Modified	\$650	\$1,300	Call	Call	N/A	N/A
Air Monitoring Badge NIOSH Method 2016 - EMSL Modified	\$150	\$190	\$230	\$305	\$380	\$458
Badge cost is \$20 each in addition to analysis fee						

About EMSL Analytical, Inc.

EMSL Analytical, Inc. is an independent and nationally recognized provider of environmental, indoor air quality, consumer product and materials testing services and products for professionals and the general public. The company has an extensive list of accreditations from leading organizations as well as state and federal regulating bodies and has provided a full range of lab analysis services for over 30 years.

Bulk (Desiccator) and Air Samples may be sent to any of the labs listed below:

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
(800) 220-3675

EMSL Analytical, Inc.
2001 East 52nd Street
Indianapolis, IN 46205
(317) 803-2997

LA Testing
11652 Knott Avenue, Unit F5
Garden Grove, CA 92841
(714) 828-4999

**Please send ASTM D 6007 Small Chamber Study (intact composite wood samples)
to the Cinnaminson, NJ lab only.**

Please contact us at 1-800-220-3675 if we can be of any additional help.