



## Application to use No Added Formaldehyde (NAF) or Ultra Low Emitting Formaldehyde (ULEF) Resins

<b>Mail Completed Application to:</b>	California Air Resources Board Stationary Source Division ATTN: Jose Saldana – NAF/ULEF application review coordinator P.O. Box 2815 Sacramento, CA 95812-2815 Phone: 916.327.5630                      E-mail: jsaldana@arb.ca.gov
---------------------------------------	--

**Pre-Application meeting:**                       I request a pre-application meeting. In this case, please complete the section below and return this form to the email or address shown above.

**Confidential Business Information:**    Please check this box if this application contains proprietary information that is confidential.

**Application Type:**

**New Application** – Please complete all sections of the application.

**Executive Order Renewal** – If there are no changes to your existing Executive Order, please complete this page and submit the required compliance test data for NAF or ULEF products.

**Amended Application** – Please complete all sections affected by the resin and/or production modification in the application.

### Company Information

1	Company name:	Application Date:	
2	Company mailing address:		
3	Company web site:		
4	Company contact person:	Title:	
5	Phone No:	Fax No:	E-mail:
6	Preparer/Consultant (if applicable) name: Address:		
7	Preparer/Consultant phone:	E-mail:	

**NOTE TO APPLICANTS:** The following acronyms are used in the application form: ATCM – Airborne Toxic Control Measure; CARB – California Air Resources Board; HWPW -- Hardwood Plywood; MDF – Medium Density Fiberboard; NAF – No Added Formaldehyde; PB – Particleboard; QC – Quality Control; ULEF – Ultra Low Emitting Formaldehyde

CONFIDENTIAL INFORMATION SUBMITTAL FORM

If you wish to designate any information in this application as **CONFIDENTIAL INFORMATION**, please provide the information requested below and return it with your completed application.

In accordance with Title 17, California Code of Regulations (CCR), sections 91000 to 91022, and the California Public Records Act (Government Code Section 6250 et seq.), the information that a company provides to the Air Resources Board (CARB) may be released (1) to the public upon request, except trade secrets which are not emissions data or other information which is exempt from disclosure or the disclosure of which is prohibited by law; and (2) to the Federal Environmental Protection Agency (EPA), which protects trade secrets as provided in Section 114(c) of the Clean Air Act and amendments thereto (42 USC 7401 et seq.) and in federal regulation; and (3) to other public agencies provided that those agencies preserve the protections afforded information which is identified as a trade secret, or otherwise exempt from disclosure by law (Section 39660(e)).

Trade secrets as defined in Government Code Section 6254.7 are not public records and therefore will not be released to the public. However, the California Public Records Act provides that air pollution emission data are always public records, even if the data comes within the definition of trade secrets. On the other hand, the information used in calculation information is a trade secret.

If any company believes that any of the information it may provide is a trade secret or otherwise exempt from disclosure under any other provision of law, **it must identify the confidential information as such at the time of submission to ARB and must provide the name, address, and telephone number of the individual to be consulted**, if ARB receives a request for disclosure or seeks to disclose the data claimed to be confidential. ARB may ask the company to provide documentation of its claim of trade secret or exemption at a later date. Data identified as confidential will not be disclosed unless ARB determines, in accordance with the above referenced regulations, that the data do not qualify for a legal exemption from disclosure. The regulations establish substantial safeguards before any such disclosure.

In accordance with the provisions of Title 17, California Code of Regulations, sections 91000 to 91022, and the California Public Records Act (Government Code Sections 6250 et seq.),

**Company name:** \_\_\_\_\_  
declares that only those portions specifically identified and submitted in this application are confidential "**trade secret**" information, and requests that it be protected as such from public disclosure. All inquiries pertaining to the confidentiality of this information should be directed to the following person:

Name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone #: \_\_\_\_\_

E-mail: \_\_\_\_\_

**Company Address:**  
\_\_\_\_\_

Application to use NAF or ULEF Resins: Composite Wood Product  
Manufacturer Information

**1. Action Requested and Background**

- a) This application is for:
- NAF based exemption (NAF)
  - ULEF – reduced testing (ULEF-reduced)
  - ULEF – exempt status (ULEF-exempt)
  - Modification to existing Executive Order No. \_\_\_\_\_

Purpose of modification:

---

---

---

- b) If applying for a NAF exemption, does your facility currently use formaldehyde containing resins for any composite wood products?

Yes             No

- c) If yes, please list the composite wood products (i.e., hardwood plywood, particle board, or MDF) that are being made with formaldehyde containing resins.

- d) Name and number of your CARB approved Third Party Certifier:

Name: \_\_\_\_\_

Number: \_\_\_\_\_

**2. Summary of Qualifying Test Results for Composite Wood Products Manufactured with NAF, ULEF-reduced, or ULEF-exempt Resins.**

Please summarize your qualification test results in three parts: (1) compliance tests conducted by the TPC indicated in section 1 (d) on page 3; (2) correlation tests between the results of the primary or secondary compliance test conducted by your TPC and the corresponding quality control (QC) test results measured by QC personnel; and (3) QC test data listed in Attachment A (i.e., minimum three-months for NAF and six-months for ULEF). If you are applying for more than one product approval, submit one copy of this page for each product.

INSTRUCTIONS: Table 1. Summary of Qualifying Test Results for NAF and ULEF Products

Part 1: **Product Type and Name:** Types are NAF, ULEF-reduced, or ULEF-exempt, name refers to “product name” in Table 2; **Test Method:** Specify either primary or secondary test method (ASTM E 1333), **Compliance Test Result:** Measured formaldehyde concentration in ppm of candidate NAF/ULEF product.

Part 2: **Pair No.:** Number of paired test; Note: If you have additional data you wish to submit, please add a note in Part 2 and attach the data in attachment A. **Compliance Test (ppm):** Measured formaldehyde concentration from compliance test for various samples to establish a correlation; **Quality Control Test Result:** Measured formaldehyde concentration from quality control test in appropriate units to correspond to the samples used on the compliance test; **Correlated ppm Value:** Compliance test “ppm” value corresponding to the measured quality control test result; **Quality Control Test Method:** Specify the test method used (e.g., ASTM D 5582, ASTM D 6007, JIS A 1460); **Linear Regression Equation and Correlation Value (r):** Provide the regression equation used to calculate the equivalent compliance test method value (in ppm) from measured quality control test value, and the correlation value for the regression equation.

Part 3: Refer to page 10 of this application.

Table 1. Summary of Qualifying Test Results for NAF and ULEF Products			
Part 1. Compliance Test Result			
Product Type and Name	Test Method	Compliance Test Result (ppm)	
Part 2. Correlation Test Results			
Pair No.	Compliance Test (ppm)	Quality Control Test Result	Correlated ppm Value
1			
2			
3			
4			
5			
Quality Control Test Method:			
Linear Regression Equation:			
Correlation Value (r):			
Part 3. Quality Control Test Results			
Label as “Attachment A.” Attach a copy of the quality control test results for the product, following the instructions on page 10 of this application. Minimum data set: three-months for NAF products, six-months for ULEF-reduced or ULEF-exempt products.			

### 3. Product Manufacturer and Resin Information

#### INSTRUCTIONS

**Composite Wood Product Manufacturer:** Enter your company's name.

#### Table 2. Composite Wood Product Information

**Product Name:** Provide the "product-name" for the range of products verified by the corresponding compliance test result in Table 1, and a description of the products. For example, "IND" for all thicknesses of industrial grade particleboard.

**Range in Production Parameters:** Provide a numerical range for press time, press temperature, and resin application rate on a 100 percent solids basis (for HWPW provide a spread rate in pounds per thousand single glue lines, and for PB and MDF provide resin usage in kilograms per cubic meter), including allowances for plant operation during warm and cold seasons of a year.

**Post-press Product Treatment:** Please indicate any post-press treatment(s), if applicable, that your product is subjected to that may modify its formaldehyde emissions.

#### Table 3. Resin Information (for the Product Type Specified in Table 2)

**Resin Type:** Specify the type of resin (i.e., NAF, ULEF-reduced, or ULEF-exempt) used, as applicable, in the face, core, or face and core (both) layers of your product.

**Resin(s) Used: Trade Name(s) and Manufacturer(s)/Supplier(s):** Provide the trade name(s) and manufacturer and/or supplier of the resins used to manufacture your product. If applicable, specify face and core resins separately.

**Estimated Annual Usage:** Provide an estimate/projection of the total amount of resin(s) used in a product in a one-year period on a 100% solids basis in pounds.

#### Table 4. Ingredients Added by Composite Wood Product Manufacturers (for the Product Type Specified in Table 2)

**Ingredient Added:** List all ingredients that you add during processing (prior to pressing, if applicable). Example ingredients are catalysts (e.g., ammonium chloride, hexamethylenetetramine, etc.), buffers (e.g., ammonia), scavengers (e.g., specific ureas), fire retardants, wax, biocides, etc. If no additional ingredients are added to the base resin, indicate as "NA."

**Amount Added per Pound of Base Resin:** Provide the range in the amount (pounds) of ingredient added per pound of base resin (100 percent solids basis).

**3. Product Manufacturer and Resin Information** (See instructions on page 5)

NOTE: If you are applying for more than one product approval, submit one copy of this page for each product.

Composite Wood Product Manufacturer: \_\_\_\_\_

Table 2. Composite Wood Product ("Product") Information			
Product Name	----- Range in Production Parameters -----		
	Press Time (min)	Press Temp. (°C)	Resin Application Rate
Post-press Product Treatment, if applicable:			

Table 3. Resin Information (for the Product Name Specified in Table 2)		
Resin Type	Resin(s) Used: Trade Name(s) and Manufacturer(s)/Supplier(s)	Estimated Annual Usage (100% solids basis)
Face:		
Core:		
Single-system:		

Table 4. Ingredients Added by Composite Wood Product Manufacturers (for the Product Name Specified in Table 2)		
Ingredient Added	Amount Added per Pound Base Resin (100% solids basis)	
	Minimum	Maximum

#### 4. Resin Ingredient Information

##### INSTRUCTIONS:

NOTE: This part requires information from both composite wood product manufacturers and resin manufacturers.

##### Information provided by composite wood product manufacturers:

**Composite Wood Product Manufacturer:** Enter the name of your company.

**Address, etc.:** Enter the mailing address of your company.

**Email:** Enter the email address for the company contact person from page 1.

**Product Name:** Enter the "Product Name" from Table 2. If you are applying for more than one product approval, submit one copy of this page for each product.

**Name of Typical Resin Name:** Enter the name of the "typical resin" that corresponds to the specified product type.

NOTE: Composite wood product manufacturers are to send the requisite number of "page 8" to their resin supplier(s) after supplying the information at the top of the page. Resin suppliers are to provide the information for Table 5 and the company information table at the bottom of the page. Completed copies of "page 8" can be sent to CARB by mail or electronically at the addresses listed below.

##### Information provided by resin manufacturers/suppliers

##### Table 5. Base Resin/Adhesive Information

**Base Resin Type:** Specify the type of base resin used by the composite wood product manufacturer (e.g., UF + melamine, PVA).

**Molar Ratio:** For ULEF resins, specify the formaldehyde:urea, formaldehyde:phenol, etc., molar ratio (e.g., 1:1, 1.07:1, etc.)

**Ingredient Name:** List all ingredients in the resin. The list should include organic compounds (carbon-based compounds), inorganic compounds (e.g., calcium carbonate, titanium dioxide, etc.), and water content.

**CAS No.:** Enter the Chemical Abstract Service (CAS) number for the ingredient listed.

**% by Weight Values:** Record the minimum and maximum % by weight of the ingredient in the resin formulation that will be used in a calendar year.

##### Resin Manufacturer Information

**Company Name:** Enter the name of your company.

**Address, Phone, Contact, etc.:** Enter mailing address of your company, phone number and name of a contact person, etc.

**Email:** Enter the email address for the company contact person from page 1.

**Phone:** Telephone number of contact person.

After resin information is complete, please mail forms to:

California Air Resources Board -- Stationary Source Division  
ATTN: Jose Saldana, NAF/ULEF Application Review Coordinator  
P.O. Box 2815, Sacramento, CA 95812-2815, or email to jsaldana@arb.ca.gov  
CONFIDENTIAL MATERIALS ENCLOSED

**4. Resin Ingredient Information (See instructions on page 8)**

**NOTE:** The box below is to be completed by composite wood product manufacturers and then transmitted to their resin suppliers to complete Table 5 and Resin Manufacturer Information

Composite Wood Product Manufacturer:	
Address:	Email:
City, State, Zip Code:	
Product Name (from Table 2)	Name of Typical Resin (from Table 3)

**NOTE:** Table 5 and “Resin Manufacturer Information” are to be completed by resin suppliers

Table 5. Base Resin/Adhesive Information			
Base Resin Polymer Type:	<sup>(1)</sup> Molar Ratio of Base Resin Components:		
Ingredient	CAS No.	----- % by Weight Values-----	
		Minimum	Maximum
Base Resin Polymer:			
Water if applicable;			
<sup>(1)</sup> Complete information for typical molar ratio, if applicable. (Assumes in-use molar ratios may be ± 10% of the reported ratio)			

RESIN MANUFACTURER INFORMATION <sup>1</sup>		
Company Name:	Contact:	
Address:	Email:	Signature:
Phone:	Title:	
<sup>(1)</sup> <b>CONFIDENTIAL INFORMATION:</b> The base resin/adhesive information presented in Table 5 has been designated as a confidential trade secret by the company listed above, pursuant to title 17, California Code of Regulations, section 91000 et seq., and the California Public Records Act, Government Code, section 6250 et seq.		



**5. Statement of Exclusive NAF or ULEF Resin Use**

As a CARB-approved composite wood product manufacturer,  
 \_\_\_\_\_ agrees to exclusively manufacture the composite wood products listed below with  NAF  ULEF resins for sale, supply, and/or use in California.

Product Name and Type	Check Applicable Resin System:		
	NAF	ULEF-Exempt	ULEF-Reduced

In signing this statement affirming that we will exclusively manufacture composite wood products with  NAF  ULEF resins for sale, supply, and /or use in California, we assume responsibility for ensuring that those products will be made according to specifications in our application to CARB and that those comply with applicable formaldehyde emission standards.

At which time, \_\_\_\_\_ decides to discontinue exclusively manufacturing specific composite wood products with  NAF  ULEF resins for sale, supply, and/or use in California, in accordance with the specifications in our application to CARB, we will provide written notification to CARB 30-days prior to making the change.

\_\_\_\_\_  
 Authorized Signature

\_\_\_\_\_  
 Date

# ATTACHMENTS

## Qualification Data

---

### Attachment A

#### **For NAF:**

As specified in section 93120.3 (c)(1) of the ATCM, data demonstrating the emissions performance of the candidate resin must be provided that includes the following:

- Three months of routine quality control (QC) testing data.
- The correlation of the routine QC testing data to primary or secondary method testing data. Please include correlation plot with corresponding regression analysis and correlation (r).
- The results of one primary or secondary method test as required by Appendix 2 of section 93120.12 of the ATCM.

#### **For ULEF (reduced testing or exemption):**

As specified in section 93120.3 (d)(1) of the ATCM, data demonstrating the emissions performance of the candidate resin must be provided that includes the following:

- Six months of routine quality control testing data.
- The correlation of the routine QC testing data to primary or secondary method testing data. Please include correlation plot with corresponding regression analysis and correlation (r).
- The results of two quarterly primary or secondary method tests as required by Appendix 2 of section 93120.12 of the ATCM

These items should be appended to the application.

---

## Other Relevant Information

---

- Attachment B** Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.
-

# Certification

Company Name: \_\_\_\_\_

I, \_\_\_\_\_, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title