

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER N-22-326

Relating to CARB Approval for an Exemption from Third-Party Certification
for Composite Wood Product Manufacturers that use
Ultra-low-emitting Formaldehyde Resins under
section 93120.3, title 17, California Code of Regulations

Daiken New Zealand Limited

Whereas, the California Air Resources Board (CARB) has adopted the “Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products” (ATCM; title 17, California Code of Regulations, sections 93120-93120.12), which establishes formaldehyde emission standards for composite products;

Whereas, section 93120.1(a)(42) of the ATCM defines “ultra-low-emitting formaldehyde” (ULEF) based resins to mean resins formulated such that average formaldehyde emissions are consistently below the Phase 2 emission standards in section 93120.2, for making hardwood plywood (HWPW), particleboard (PB), medium density fiberboard (MDF), or thin medium density fiberboard (tMDF);

Whereas, section 93120.3(d) of the ATCM allows manufacturers of HWPW, PB, MDF, and tMDF who use ULEF-based resins to apply for written approval from the Executive Officer for an exemption from the requirements of section 93120.3(b) of the ATCM;

Whereas, section 93120.3(d) of the ATCM allows manufacturers of HWPW, PB, MDF, and tMDF who use ULEF-based resins to submit an application to the Executive Officer for an exemption from the requirements of section 93120.3(b) of the ATCM; the application shall include: (A) a statement indicating which product types will be manufactured using ULEF-based resins for sale in California; (B) the chemical formulation of the candidate ULEF-based resins, including base resins, scavenger resins, scavenger additives, catalysts, and other additives as used in manufacturing; (C) the name of their CARB-approved third-party certifier (TPC); and (D) data on the emissions performance of the candidate ULEF-based resins;

Whereas, the data on emissions performance of the candidate ULEF-based resin required in section 93120.3(d) of the ATCM must be obtained by working with a CARB-approved TPC, and must include six months of routine quality control testing data, the correlation of the routine quality control testing data to primary or secondary testing data, and the results of two primary or secondary method tests, as required in Appendix 2 of section 93120.12 of the ATCM;

Whereas, section 93120.3(d)(2) of the ATCM requires that 90 percent of the six months of routine quality control testing data and the results of two primary or secondary method tests must be shown to be no higher than 0.04 parts per million (ppm), and that all data must be shown to be no higher than 0.05 ppm for HWPW and 0.06 ppm for PB, MDF, and tMDF;

Whereas, section 93120.3(d)(5) of the ATCM provides that the Executive Officer shall approve the application and issue an Executive Order if the evidence submitted by the applicant is sufficient to demonstrate that the applicant has met the requirements specified in sections 93120.3(d)(1) and 93120.3(d)(2) of the ATCM;

Whereas, Daiken New Zealand Limited (Daiken New Zealand or the applicant) submitted an original application received on September 28, 2018;

Whereas, the original application from Daiken New Zealand specified the range in product manufacturing parameters, applicable post-press product treatments, base resin trade name(s) and base resin manufacturer(s)/supplier(s), and other ingredients added to the base resin by the applicant to manufacture ULEF tMDF products;

Whereas, CARB was provided base resin/adhesive information specifying the base resin polymer type and minimum and maximum values of all major and any minor ingredients in the base resin on a percent weight of solids basis;

Whereas, the base resins/adhesive supplier, commercial name, and resin type are set forth in Confidential Attachment A;

Whereas, section 93120.3(d) of the ATCM allows ULEF product manufacturers to apply for re-approval by CARB by submitting an updated application;

Whereas, Daiken New Zealand submitted the original and the updated applications for approval to CARB as follows:

Executive Order #	Date Received	Date Signed	Actions
N-18-326	09/28/2018	10/15/2018	Original
N-20-326	09/09/2020	10/01/2020	Renewal

Whereas, Daiken New Zealand submitted an updated application for re-approval to CARB on September 23, 2022;

Whereas, the updated application for renewal from Daiken New Zealand was deemed complete on November 3, 2022;

Whereas, the Executive Officer finds that the completed, updated application demonstrated the ULEF manufacturer's ability to continue to comply with section 93120.3(d) of the ATCM; and

Whereas, the Executive Officer approved Daiken New Zealand's request for re-approval, and it is appropriate that Executive Order N-20-326 be superseded by this Executive Order N-22-326.

Now, therefore, it is ordered that Daiken New Zealand is hereby approved as a ULEF manufacturer of tMDF that is exempt from the requirements of section 93120.3(b) and Appendix 2 of section 93120.12 of the ATCM, provided that the following terms and conditions are met for products sold, supplied, offered for sale, or manufactured for sale in California:

1. Daiken New Zealand must use the commercial resins listed and suppliers listed in Section A of Confidential Attachment A of this Executive Order for the manufacture of ULEF tMDF products.
2. As specified in Section B of Confidential Attachment A, Daiken New Zealand is legally responsible for ensuring that the base resin specifications are within the ranges specified in the original application and any subsequent amendments of this Executive Order.
3. The application rate of the base resins used for the manufacture of ULEF tMDF composite wood products by Daiken New Zealand must be within the ranges specified in Section C of Confidential Attachment A of this Executive Order.
4. Other chemical components of the base resins (such as sizing wax and release wax) used for the manufacture of ULEF tMDF products by Daiken New Zealand must be within the ranges specified in Section D of Confidential Attachment A of this Executive Order.
5. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the ULEF tMDF products by Daiken New Zealand must be within the ranges specified in Section E of Confidential Attachment A of this Executive Order.
6. Only the composite wood products with the product names listed in Section F of Confidential Attachment A of this Executive Order are authorized under this Executive Order.

Be it further ordered that this Executive Order N-22-326 supersedes Executive Order N-20-326, which was signed on October 1, 2020.

Be it further ordered that Daiken New Zealand may change the resin system supplier listed in Section A of Confidential Attachment A of this Executive Order if the new resin supplier supplies the same resin type listed in Confidential Attachment A of this Executive Order, at least two primary or secondary method tests are performed on

random samples selected by their CARB-approved TPC, and the Chief of the Risk Reduction Branch within the Transportation and Toxics Division is notified before Daiken New Zealand uses the resin for production.

Be it further ordered that Daiken New Zealand must conduct confirmatory testing for a new resin supplier by demonstrating that the results of two primary or secondary method tests for the new resin system supplier are no higher than 0.04 ppm for the ULEF products authorized under this Executive Order.

Be it further ordered that the Executive Officer may review and, for good cause, modify or revoke this Executive Order as provided in section 93120.3(d)(5) of the ATCM. The Executive Officer shall not modify or revoke this Executive Order without affording the applicant the opportunity for a hearing in accordance with the procedures specified in title 17, California Code of Regulations, section 60055.1 et seq.

Be it further ordered that this Executive Order shall have a duration of two years from the date this Executive Order is signed; the applicant may apply for re-approval as provided in section 93120.3(d)(5) of the ATCM.

Be it further ordered that the applicant must maintain records in electronic or hard copy form for two years, for review by CARB upon request, as specified in section 93120.3(g) of the ATCM.

Be it further ordered that the applicant must notify the Executive Officer in writing within 30 days if there is any change in their product manufacturing parameters or base resin manufacturer(s) or supplier(s) that does not comply with any of the requirements, terms or conditions specified in the ATCM or this Executive Order.

Executed at Sacramento, California on this 2nd day of December 2022.



Robert Krieger, Chief
Risk Reduction Branch
Transportation and Toxics Division

Confidential

Attachment A
Formulation Data and Operating Parameters
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Daiken New Zealand Limited

Section A.

Resin Supplier: **Hexion New Zealand Limited**
• Address: 165 Totara Street
Tauranga, New Zealand

Commercial Resin Name: **Casco-Resin™ U1189**
• Resin Type: Melamine Urea Formaldehyde (MUF)

Section B.

Base Resin Chemical Formulation (Percent by Weight):

Daiken New Zealand Limited remains legally responsible under this Executive Order for ensuring that the base resin specifications are within the ranges specified in the original application and any subsequent amendments to this Executive Order.

Section C.

Base Resin Application Rate (kg/m³):

- tMDF (min/max): 85 to 125

Confidential

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Section D.

Other Ingredients Added by the Composite Wood Product Manufacturer (Amount Added per Pound of Base Resin on a 100 Percent Solids Basis):

- None

Section E.

Allowable Operating Parameters:

- Press Temperature (°C):
 - tMDF (min/max): 160 to 230
- Press Time (minutes):
 - tMDF (min/max): 0.36 to 1.62

Section F.

Product Name & Type Authorized in Executive Order N-22-326:

- Customwood ULEF tMDF
 - thickness range = (0.09 to 0.315 inch)