

Boost sustainability, improve product performance and lower costs with DuraBind binders

Consumer preference for sustainable products and increasingly stringent regulatory demands have driven retailers, architects and manufacturers to seek out bio-based alternatives to the traditional binder systems which have been used for decades in the wood composites industry. A no added formaldehyde (NAF) solution, DuraBind bio-resin is used by an increasing number of building materials manufacturers to achieve their sustainability objectives and meet consumer demand.

Sustainability, Economic & Performance Benefits

Go beyond NAF with DuraBind

We're surrounded by wood composites - and formaldehyde. Formaldehyde is one of the primary binding agents used in wood composites. It is also recognized as a human carcinogen by an increasing number of health agencies worldwide.

Increasing regulations. Governments and regulators are taking action to reduce and restrict the use of formaldehyde in a range of products. Using renewable binders, such as DuraBind, to replace highly regulated chemicals in the production of particle board (PB), medium density fiber board (MDF), oriented strand board (OSB), veneers and laminates, allows you to meet stakeholder expectations and comply with legislation.

No added formaldehyde? No problem. Wood composite products made with DuraBind engineered biopolymers can be used to meet global formaldehyde emission standards, such as CARB Phase 2, European E0 and E1 and Japanese F-Star regulatory standards.

Improve economics

Cost competitive. DuraBind technology delivers a bio-based, no added formaldehyde solution at comparable full system cost to incumbent formaldehyde-based solutions.

Deliver on your sustainability commitments, differentiate, and grow. DuraBind enables you to offer higher value, safer building materials. Differentiate your product with a bio-based no added formaldehyde product and meet consumer demand for safer products.

Commercially available today

Change is coming. Consumers are asking for it. Many of the world's largest retailers have pledged to eliminate it. Regulators are taking action against it. A day without formaldehyde in the building products industry is coming. Will you be ready?

Eliminate formaldehyde today. A no added formaldehyde alternative is available today. DuraBind is in commercial use with wood composites manufacturers and is available globally. In fact, more than 10 million square feet (930 000 square meters) of wood composite boards have already been produced for sale using DuraBind.

What is DuraBind?

DuraBind™ technology is a sustainable no added formaldehyde (NAF) resin solution for the \$15 billion global wood binder market.

DuraBind technology enables wood composite manufacturers to eliminate the use of harmful chemicals and maximize the amount of renewable content in their products.

DuraBind technology delivers value across the supply chain

Using DuraBind binders to replace increasingly regulated formaldehyde-based resins means that:

- **Manufacturers** reduce complexity associated with manufacturing and safety regulations - without increasing costs
- **Architects** can incorporate products that meet sustainability requirements
- **Consumers and retailers** can access the sustainable products they're seeking

Key performance features

Comparison to alternatives

Mechanical Properties



- Internal bond
- Modulus of rupture
- Screw pull

Emissions



- Formaldehyde-free
- Can be used to meet CARB2, EO, E1 and F**** standards
- LEED compliant

Processability



- Eliminate MDF blow line build-up
- Improve machinability
- Reduce release agent usage
- Improve pot life of resonated fiber
- Improve press cycle time compared to other NAF alternatives

All EcoSynthetix products, including **DuraBind technology**, offer a compelling value proposition with economic, performance and sustainability benefits.

Working with Us

The EcoSynthetix team is fully equipped to provide you with technical support, from initial testing to final implementation. We work closely with our customers to ensure our products seamlessly integrate into your existing operations.

About EcoSynthetix

EcoSynthetix offers a range of engineered biopolymers that replace non-renewable chemicals used to manufacture many products, such as paper and packaging, and wood composites. The Company's flagship products, EcoSphere[®] biolatex[®] and DuraBind[™] biopolymers, provide customers with a sustainable alternative that reduces the use of hazardous chemicals, improves performance and delivers economic benefits. The Company is publicly traded on the Toronto Stock Exchange (T:ECO).

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