



ULTRAWOOD

DCOI Preservative Raises the Bar in Glulam Protection

About DCOI

- An organic, broad-spectrum biocide
- Is not a Restricted Use Pesticide
- The active biocide in Ultrawood is 4,5-Dichloro-2-n-Octyl-4-Isothiazolin-3-One or DCOI.
- Emits low to no odor (entirely solvent carrier dependent)
- Is stable and leach resistant
- Very effective – standardized by the American Wood Protection Association (AWPA)
- DCOI is used in, and currently sold as:
 - a wood preservative fungicide component in the AWPA standardized:
 - EL2 formulation used for Ecolife® treated wood
 - DCOI formulation used for UltraPole® NXT treated utility poles and crossarms
 - a marine antifoulant
 - an algaecide for cooling towers
 - a fungicide/bactericide for in-can paint formulations
 - a component in water treatment, coatings, adhesives, vinyl roof membranes, drywall, vinyl flooring, marine upholstery, outdoor furniture and shower curtains.

Decades of stake test data monitored by Mississippi State University, a leader in wood preservative research, indicate DCOI is an extremely effective wood preservative. Tested in the challenging environments of sub-tropical test plots in Dorman Lake and Saucier, MS, DCOI proved its efficacy as a fungicide and termiticide.

Glulam used in the "fertile market" for the French Pavilion in the Milan Expo >





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The leading, non-metallic wood preservative is now available in glulam products.

Environmentally Advanced

- DCOI treated glulams contain no:
 - 1. Dioxins
 - 2. Furans
 - 3. PAH's
 - 4. Heavy metals such as copper, arsenic or zinc
- DCOI treated glulams contain 1/3 the preservative retention of penta treated glulams. The effectiveness of DCOI at lower retentions translates to fewer chemicals in the environment.
- DCOI is not a restricted use pesticide.
- DCOI is not a persistent organic pollutant.
- DCOI has very low water solubility.
- Contributes points to green building certifications
- Is the same active ingredient used in marine antifouling formulations that won the 1996 US EPA Presidential Green Chemistry Challenge Award
- DCOI is also the active ingredient in Ecolife®, a non-metal based, above ground residential deck preservative.
- Uses less energy, fossil fuels, and water to produce; with lower ecotoxicity than other materials

- AWPAs lists DCOI in the P-39 standard. DCOI is AWPAs standardized for laminated poles and laminated beams and timbers.
- Laminated wood may be treated with DCOI in AWPAs HSA (hydrocarbon solvent - type A) and HSC (hydrocarbon solvent – type C).
- DCOI label is currently for non-interior uses.

Glulam Hardware

Use building-code approved, corrosion-resistant fasteners and connectors suitable for use in pressure-treated wood.

- Hot-dipped galvanized steel is recommended and should conform to ASTM A153 for fasteners and ASTM A653, G185 for connectors.
- For coastal installations, use code approved stainless steel.
- Stainless steel offers the best protection. Type 304 or higher stainless steel is recommended for very wet environments. Type 316 or higher is recommended for exposure to salt or saltwater.
- Caution: Do not mix metals: Use stainless-steel fasteners with stainless-steel connectors and galvanized fasteners with galvanized connectors.

Performance and Standards

- Twenty-eight years of field data initiated by the Electric Power Research Institute and monitored by Mississippi State University show that DCOI provides effective protection against wood destroying organisms. These long-term tests indicate performance that is superior to the most common oil-borne treatments while using much lower amounts of preservative.

About Viance, LLC

Viance is a leading provider of wood treatment preservatives, offering an extensive range of advanced wood treatment technologies and services to the global wood preservation industry. With expertise in wood biocides and wood protection chemicals, Viance technologies improve the performance and durability of wood products for sustainable building.



The glulam framework shows an intricate design that would not be possible with regular wood. Photo courtesy of Structural Wood Systems (SWS).

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