



LSU AgCenter Office of Intellectual Property

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Coating for Fire-Retardant Wood and Wood Composites

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Description



Scientists at the LSU AgCenter have developed a cost-effective and environmentally friendly solution to protect engineered wood products from fire, water, and biological damage. They have created a new flame-retardant polymer wood coating using a common ingredient in food and cosmetic products. Wood coatings can reduce both the strength of the wood and the glue used to hold the wood boards in place if they contain water-soluble compounds that allow the coatings to be dissolved over time. This invention also contains compounds that reduce the amount of flammable gases and oxygen released in response to heat, which enhances its fire resistance. This innovation offers a promising option for the industry, addressing the need for a more affordable and sustainable solution for fire protection in engineered wood products.

Advantages:

- Cost-effectiveness
- Environmentally friendly
- Water resistant
- Enhanced fire resistance
- Insect and termite resistance

Commercial Uses:

- Construction
- Furniture manufacturing
- Packaging



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