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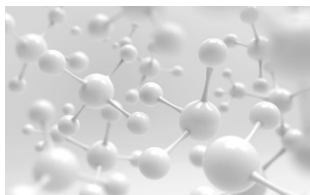
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Lignin Nanoparticles for Delivering Beneficial Agrochemicals and Creating Tunable Surfaces

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Description:

This invention focuses on eco-friendly materials made from natural sources, specifically lignin, which can be used to deliver medicines and agricultural products effectively. The team developed nanoparticles of controlled properties from these materials allowing them to transport agricultural chemicals to plants while boosting their natural defenses. These materials can also potentially be shaped into coatings, 3D printed items, or thin films and gels, providing protective barriers against water and UV light, similar to Teflon. This versatility may make them valuable for creating surfaces that fight germs or release medicines, enhancing the efficiency of drug and agricultural product delivery in both medical and farming applications.



Advantages:

- Eco-Friendly
- Customizable particle size and polarity
- Enhanced delivery of agrochemicals and drugs
- Wide range of potential applications

Commercial Uses:

- Agrochemical
- Medical
- 3D Printing Applications
- Sustainable Packaging Solutions
- UV Shielding Products



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