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Utilization of supercritical carbon dioxide in fabrication of cellulose acetate films with anti-biofilm effects against *Pseudomonas aeruginosa* and *Staphylococcus aureus*

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Highlights

- Cellulose acetate films were impregnated with thymol using supercritical CO₂
- Target thymol contents for desired antibacterial activity were in the range 26-30%
- Thymol prevented *S. aureus* and *P. aeruginosa* attachment to films' surfaces
- Released thymol reduced biofilm formation on the surrounding surfaces
- The films showed strong anti-biofilm activity against antibiotic resistant strains

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