

## Antimicrobial Property of Urushiol from Lacquer Trees Impregnated in Polydimethylsiloxane Matrix

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Urushiol, obtained by extraction from the sap of natural lacquer tree, has been used as an excellent coating for thousands of years in Korea, China and Japan. Its durability and antimicrobial property have potential industrial applications where bacterial contamination as well as endocrine disrupting should be avoided. Our report will include purification of urushiol from the sap of natural lacquer tree, development of urushiol-containing and urushiol-coated polydimethylsiloxane(PDMS) matrix and their antimicrobial property. The effect of urushiol content in the matrix, temperature of PDMS polymerization and thickness of the urushiol coating on the antimicrobial property will also be shown in term of the number of surviving bacteria depending on the time elapse during cell culture.