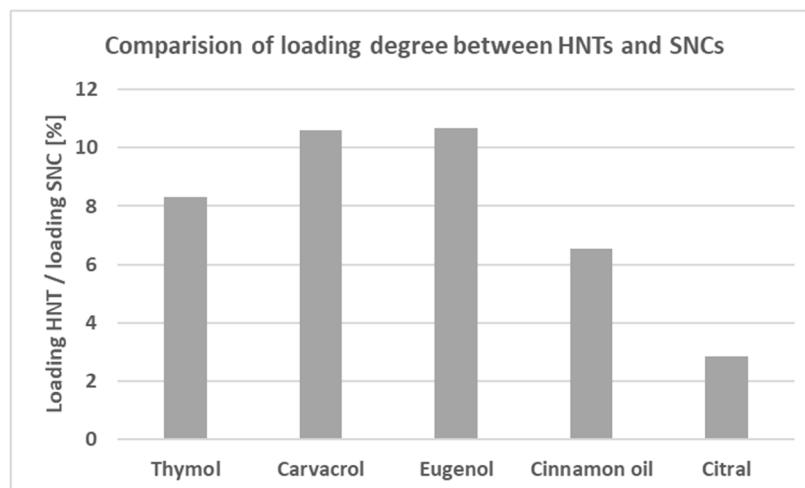
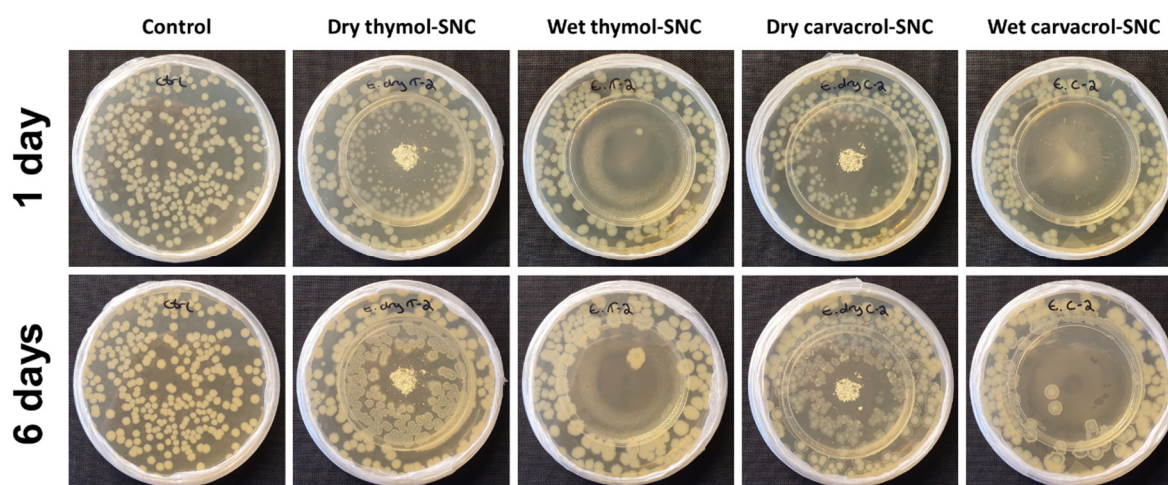


## Supplementary data to: Controlled release of volatile antimicrobial compounds from mesoporous silica nanocarriers for active food packaging applications

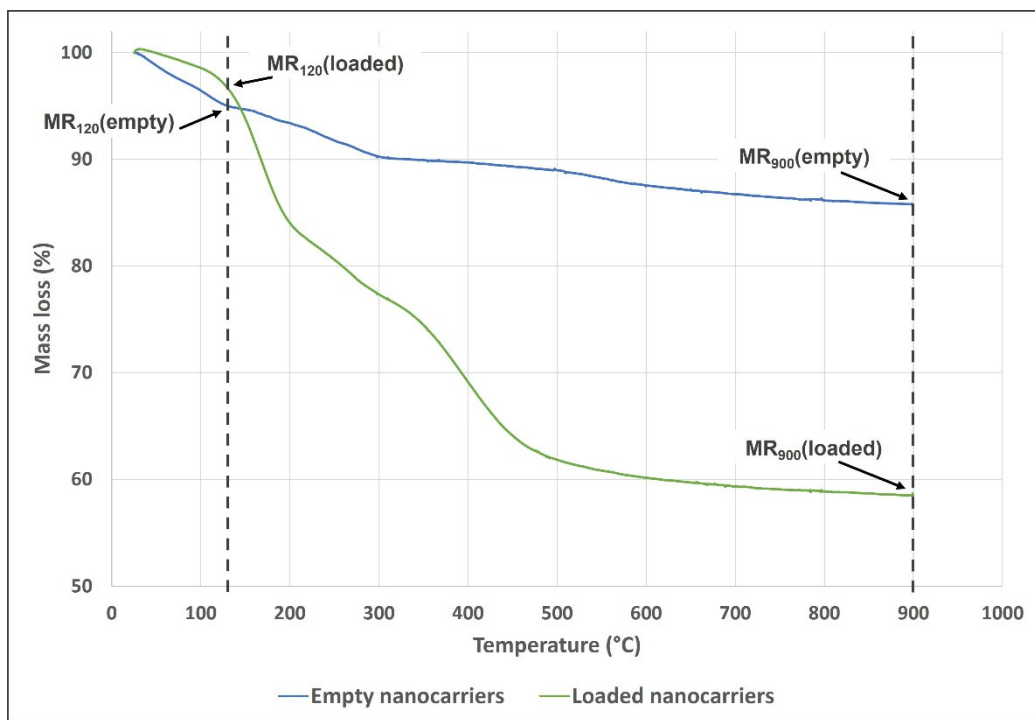
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**Supplementary Figure S1.** The total amount of the encapsulated active compounds in halloysite nanotubes (HNTs) are compared with silica nanocarriers (SNCs) and are presented in percentage.



**Supplementary Figure S2.** Antimicrobial effect of silica nanocarriers (SNC) loaded with thymol or carvacrol on *Escherichia coli*. The pictures were taken after one day and six days of incubation at 37 °C. A clear effect on the growth of the bacteria can be seen for both thymol and carvacrol loaded SNCs. However, a more pronounced antimicrobial effect is revealed after activating the release from the SNCs (named “wet” in the figure). A change in the morphology of the bacteria treated with the active compounds could also be noticed.



**Supplementary Figure S3.** Examples of percent mass residue (MR) values are illustrated to assist the explanation of the equations used for determining the encapsulated amount active compound by thermogravimetric analysis (TGA).