

# Effect of Organic Tin Compounds on Electric Properties of Model Membranes

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The objective of the present work was to investigate the effect of selected organic tin compounds and potassium chloride (used as a reference substance) on the trans-membrane electric voltage and electric resistance of model membranes, the latter being nitrocellulose filters impregnated with butylene ester of lauric acid. The increasing KCl concentration (in the measurement chambers) caused a rapid rise of the negative trans-membrane voltage, whose value stabilized afterwards. In the case of  $(\text{C}_3\text{H}_7)_3\text{SnCl}$  an abrupt maximum of the negative voltage was observed followed by a monotonic drop to zero. In the case of highest concentrations of this compound the voltages, after having reached zero, changed their polarization to the opposite. Within the range of small concentrations two slight voltage maxima were observed. Non-ionic tin compounds like  $(\text{CH}_3)_4\text{Sn}$  and  $(\text{C}_2\text{H}_5)_4\text{Sn}$  had an insignificant influence on the electric properties of the studied membranes.

*Key words:* Lauric Acid, Nitrocellulose Filters, Tin Compounds