

# Adsorption Phenomena on Ultrafiltration Membrane

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The influence of low molecular hydrophobic solute such as hexanol, octanol and octanoic acid of flux reduction of two ultrafiltration membranes were studied in this investigation. The two membranes were a hydrophobic membrane made of polysulphone GR51 with a nominal molecular weight cut-off of 50 000 Da, and a hydrophilic membrane made of cellulose acetate CA600 with a nominal molecular weight cut-off of 20 000 Da. The concentrations of the different solute were found to have a marked influence on the flux. The concentration of hexanol solution was found to have the most significant influence followed by octanol then octanoic acid. The flux reduction was moderate at lower concentrations, but it became higher when the concentration has been increased. The flux reduction of hydrophilic membrane was marginally reduced, whereas the flux reduction of hydrophobic membrane was significant due to adsorption of the solutes.