

**STUDY OF PHENOL TRANSPORT USING
POLYMER INCLUSION MEMBRANE (PIM) METHOD
WITH COPOLY(EUGENOL-DIVINYLBENZENE) AS CARRIER**

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Abstrak. Phenol is a toxic organic compound, dangerous and hardly degradable which is commonly found as the waters pollutants. The study of phenol transport using the Polymer Inclusion Membrane (PIM) method with copoly(eugenol-DVB) as the carrier compound was carried out to resolve this problems. Some parameters that influence phenol transport have been investigated, including the pH of the source phase phenol, receiver phase NaOH concentration, PIM membrane thickness and transport time. PIM membranes that have been used for transport for 24 hours were characterized using SEM and FT-IR. The concentration of phenol after transport was determined by UV-Vis spectrophotometry using 4-amino antipyrine reagents and the absorbance was measured at wavelength $\lambda = 456$ nm. The results showed that PIM membranes with copoly(eugenol-DVB) 10% as carrier compounds were able to transport phenol effectively by 89.40% at optimum conditions: pH of the source phase phenol 5.5, 0.1 M NaOH concentration, T₂₇ type PIM membrane thickness and transport time for 24 hours.