

ABSTRACT

OPTIMIZATION TRANSPORT OF PARACETAMOL THROUGH CHLOROFORM BY BULK LIQUID MEMBRANE TECHNIQUE

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Paracetamol or acetaminophen is analgesic/antipyretic that is widely used and routinely produced and sold throughout the world as the main product. However, paracetamol had a fairly good stability so that the elimination or reduction through natural degradation is not comparable with the inclusion of paracetamol to the environment. Therefore we need a method that can remove or reduce the concentration. The concentration of paracetamol measured using UV-Vis spectrophotometer. Based on the research that's been done can be concluded that paracetamol can be transported using bulk liquid membrane technique. Operation technique helped with magnetic stirrer at velocity 340 rpm and time balance after transport 15 minutes. The result showed the optimum conditions for the transport of paracetamol at pH 5, the concentration of paracetamol as a source phase 1×10^{-4} M, the concentration of NaOH as the receiver phase of 0.01 N and the length of stirring time 240 minutes. In this condition, the percentage obtained paracetamol capable transported to the recipient phase amounted to 62,22% and the percentage of residual paracetamol in phase source 43,16%.

Keywords: paracetamol, membranes, bulk liquid membrane, UV-Vis spectrophotometry.