

Di-(2-ethylhexyl) phosphoric acid (D2EHPA): preparation of 100 mL from 5%(v/v) D2EHPA in 950 mL Kerosene as organic solvent prepare a 0.1M (DTPA) solution as stripping agents. $C_{\text{feed,initial}} \sim 6.25 \times 10^{-6} \text{M}$, $C_{\text{feed,final}} \sim 1.25 \times 10^{-6} \text{M}$, $C_{\text{external,final}} \sim 3.781 \times 10^{-3} \text{M}$, volume of the feed phase (V_{feed}) = 0.950 L, volume of the D2EHPA ($V_{\text{extractant}}$) as 0.050 L, Amount initially of 60Co as 1.99×10^{-4} moles, Molar mass of Co^{2+} = 59.93 g/mol = 0.167 mmol/g; Amount of Co^{2+} in mmol = Amount of Co^{2+} in g / Molar mass of Co^{2+} = 0.01 g / 0.167 mmol/g = 0.006 mmol or $0.6 \times 10^{-4} \text{M}$? $C = -0.00398 \text{M}$, surface area = 1mm and $K=8$ and amount of Co transfer as $1.592 \times 10^{-4} \text{mol}$ of Co^{2+} is transferred from the aqueous phase to the organic phase. the extraction efficiency ? ~80.1%. The stability of the emulsion membrane and the pH of the feed phase are important for ?% in all experimental transfers at 50°C. Schematic of stability of emulsion membrane and the pH of the feed phase is 6.3 which is critical for extraction efficiency(?) in all experimental transfers at 50°C. Note that the emulsification process .creates a stable and uniform emulsion 10,11