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 feed,initial~ 6.25x10−6M, Cfeed,final~1.25x10−6M, Cexternal,final~ 3.781x10−3M, volume of the feed phase (V feed)=0.950 L, volume of the D2EHPA (V extractant) as 0.050 L, Amount initially of 60Co as 1.99x10−4 moles, Molar mass of Co2+ = 59.93 g/mol= 0.167 mmol/g;Amount of Co2+ in mmol = Amount of Co2+ in g / Molar mass of Co2+= 0.01 g / 0.167 mmol/g= 0.006 mmol or 0.6 x 10−4 M ?C =−0.00398 M,surface area=1mm and K=8 and amount of Co transfer as 1.592 x 10−4 mol of Co2+ 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 emulsion10,11.