



**➤ Results*****Part 1: effect of co-solvent***

<b>Ethanol percentage (v/v)</b>	<b>Dilution factor</b>	<b>Absorbance</b>
0		
5		
7.5		
10		
15		
20		

***Part 2: effect of temperature***

<b>Temperature (C)</b>	<b>Dilution factor</b>	<b>Absorbance</b>
25		
50		
70		

➤ **Calculations:****Part 1: effect of co-solvent**• **Calibration Curve Equation**

$Y = 604 X$ , Knowing that the concentration (X) is in (mg/ml)

Ethanol (% w/v )	Absorbance	Concentration (mg/ml)	Dilution factor	Solubility (mg/ml)	Solubility (%w/v)
0					
5					
7.5					
10					
15					
20					

- **Insert Excel Sheets (Charts) of :** Effect of Co-solvent on salicylic acid Solubility.

***Attach these paper to your report IMMEDIATELY after  
this page of the report.***

Experiment number:

Continued from page number:

**Part 2: effect of temperature**

- **Calibration Curve Equation**  
 $Y = 604 X$ , Knowing that the concentration (X) is in (mg/ml)
- **Salicylic acid molecular weight = 138 g/mole**

T (C°)	T (K)	Absorbance	Diluted concentration (mg/ml)	Dilution factor	solubility (mg/ml)	mole salicylic acid in 1 ml (mmole)	mole water in 1 ml (mmole)	solubility (mole fraction)
25								
50								
70								

1/T	log S

- **Insert Excel Sheets (Charts) of: log S vs. 1/T**

***Attach these paper to your report IMMEDIATELY after this page of the report.***



➤ **Discussion:**

**Part 1: effect of co-solvent**

Describe the effect of Co-solvent on salicylic acid solubility

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**Part 2: effect of temperature**

Describe the effect of temperature on salicylic acid solubility, is it an exothermic or endothermic reaction?

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**Conclusion:**

*(here conclude about: effect of Co-solvent and effect of temperature on drug solubility)*

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