

### **Kinetic hydrolysis of aspirin**

➤ **Objective/s:**

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➤ **Formula: (Table)**

<b>Formula Number</b>	<b>Ingredients</b>	<b>Quantities</b>
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.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
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➤ **Method:**

(This section should contain any calculations related to prior experiment preparation, if none please write NA and close it)

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Experiment number:

Continued from page number:

➤ **Results:**

Time (minute)	Absorbance
10	
20	
30	

➤ **Calculation:**

• **Calibration Curve Equation**

$Y = 426 X$ , Knowing that the concentration ( $X$ ) is in (mole/L = M)

Time (minute)	Absorbance	Hydrolyzed aspirin Concentration (M)	Initial aspirin Concentration $[A]_0$ (M)	Remained Aspirin concentration $[A]_t$ (M)	$\ln [A]_t$
10					
20					
30					

• **Insert Excel Sheets (Charts) of:**

1.  $[A]_t$  vs. time
2.  $\ln [A]_t$  vs. time

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

➤ **Discussion:**

- **What is the reaction order of aspirin hydrolysis? Explain your answer**

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- **Determine the rate constant K of aspirin hydrolysis? Show your calculation**

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- **Calculate the half-life  $t_{0.5}$  of aspirin and describe what does it mean**

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➤ **Conclusion:**

*(here conclude about: the order of aspirin hydrolysis)*

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