

EXPERIMENT

AIM - To prepare 250 ml solution of 0.7M magnesium chloride solution.

SETUP – Stockroom explorer lists various chemicals that are to be used for this experiment. It has distilled water for making solutions. Sub-solids such as sodium chloride, magnesium chloride and sodium sulphates.

APPARATUS REQUIRED – Magnesium chloride, Distilled water, Erlenmeyer Flask (500ml), Volumetric Flask (250ml), Pipette (5ml)

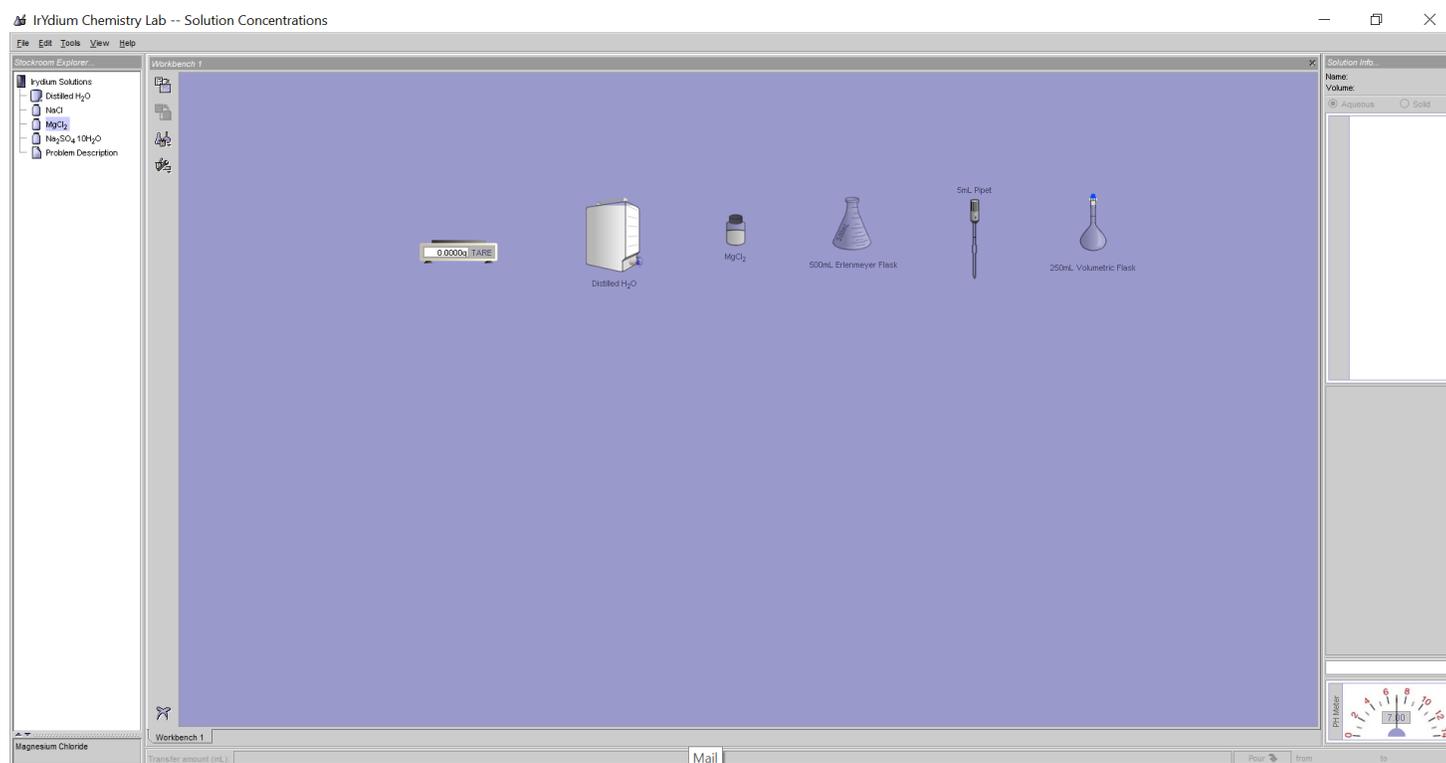


IMAGE-1: APPARATUS USED IN THIS EXPERIMENT

CALCULATION – Molar mass of $\text{MgCl}_2 = 95.211\text{g/mol}$

Formula :- $M = \text{wt}/\text{molar mass} * 1000/\text{ml}$

$$0.7 = \text{wt}/95.211 * 1000/250$$

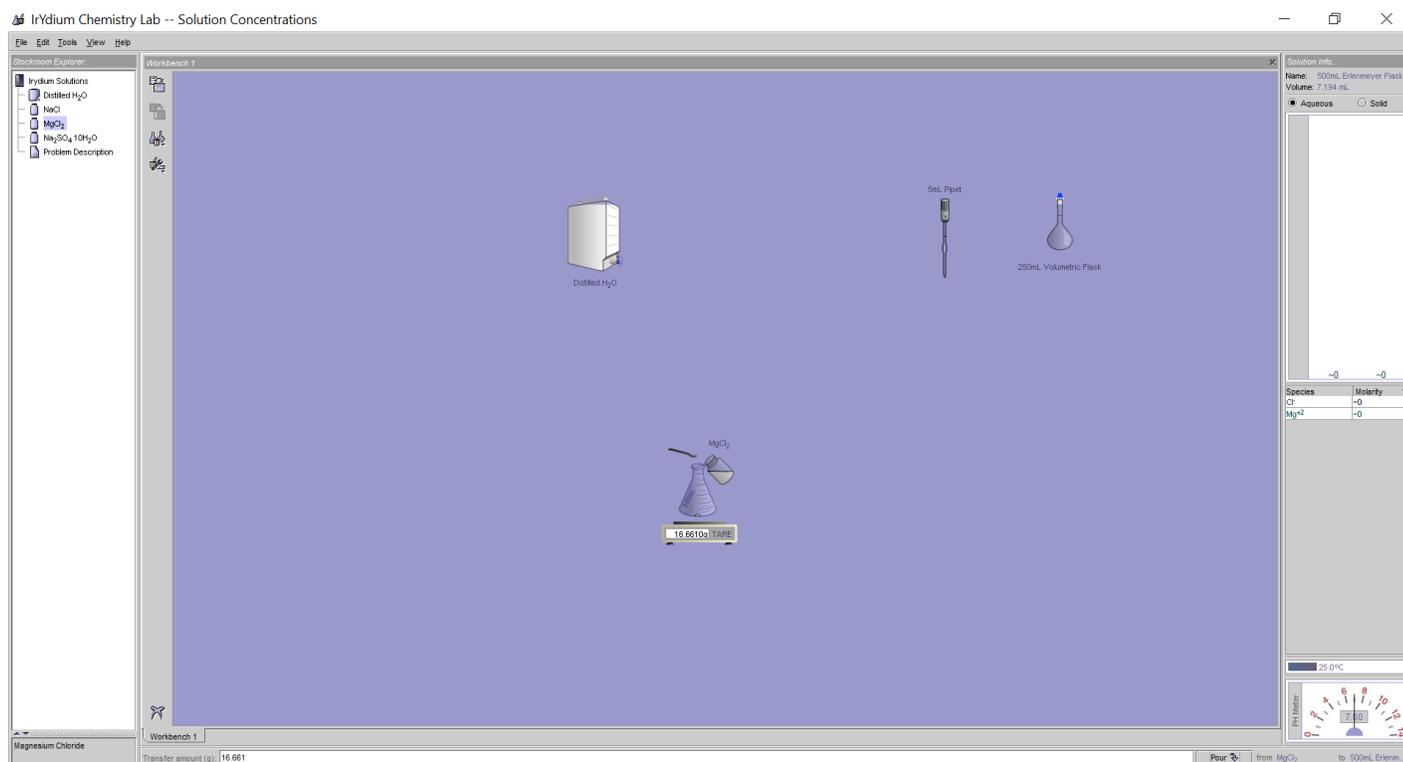
$$Wt = \underline{16.661g}$$

PROCEDURE –

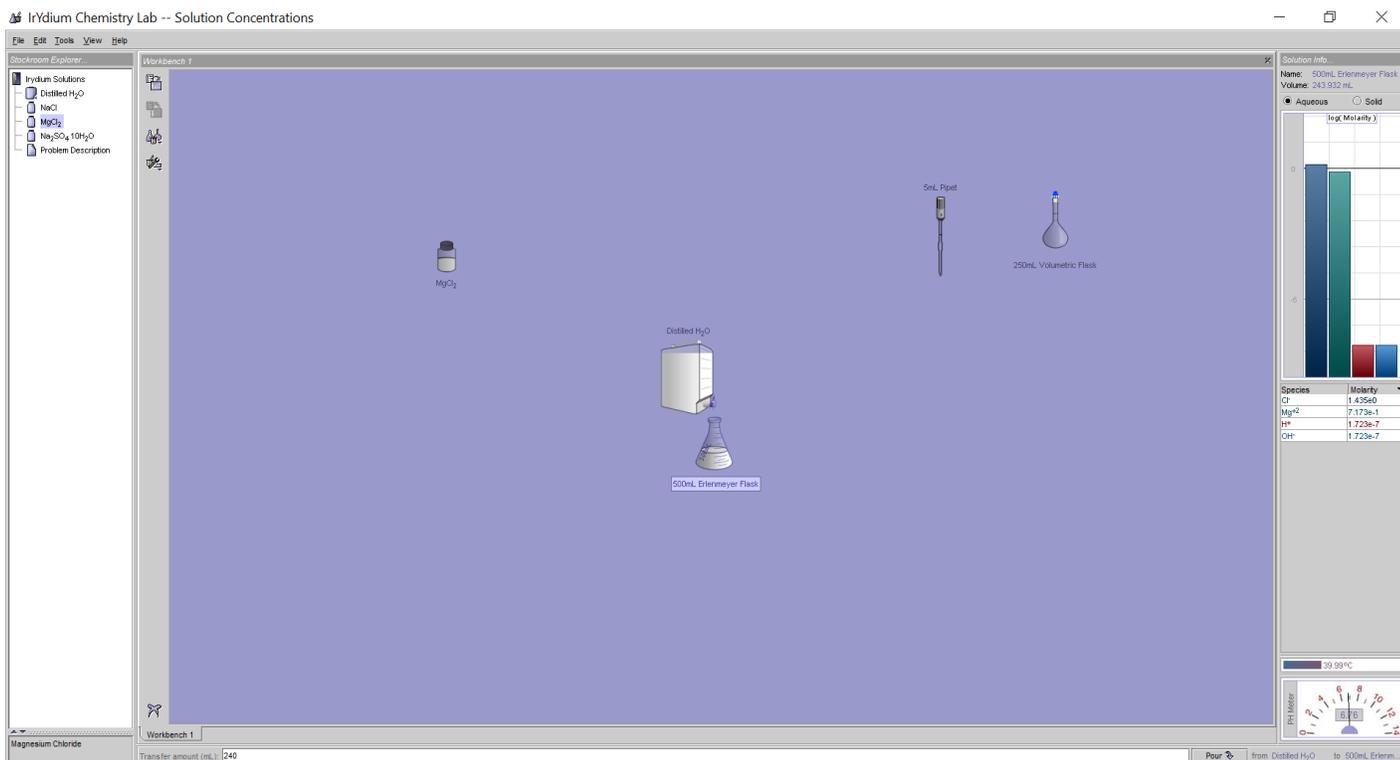
Place the required chemicals and apparatus from Stockroom Explorer to the workbench that is $MgCl_2$ and distilled H_2O .

Place scale (measuring element) to the workbench.

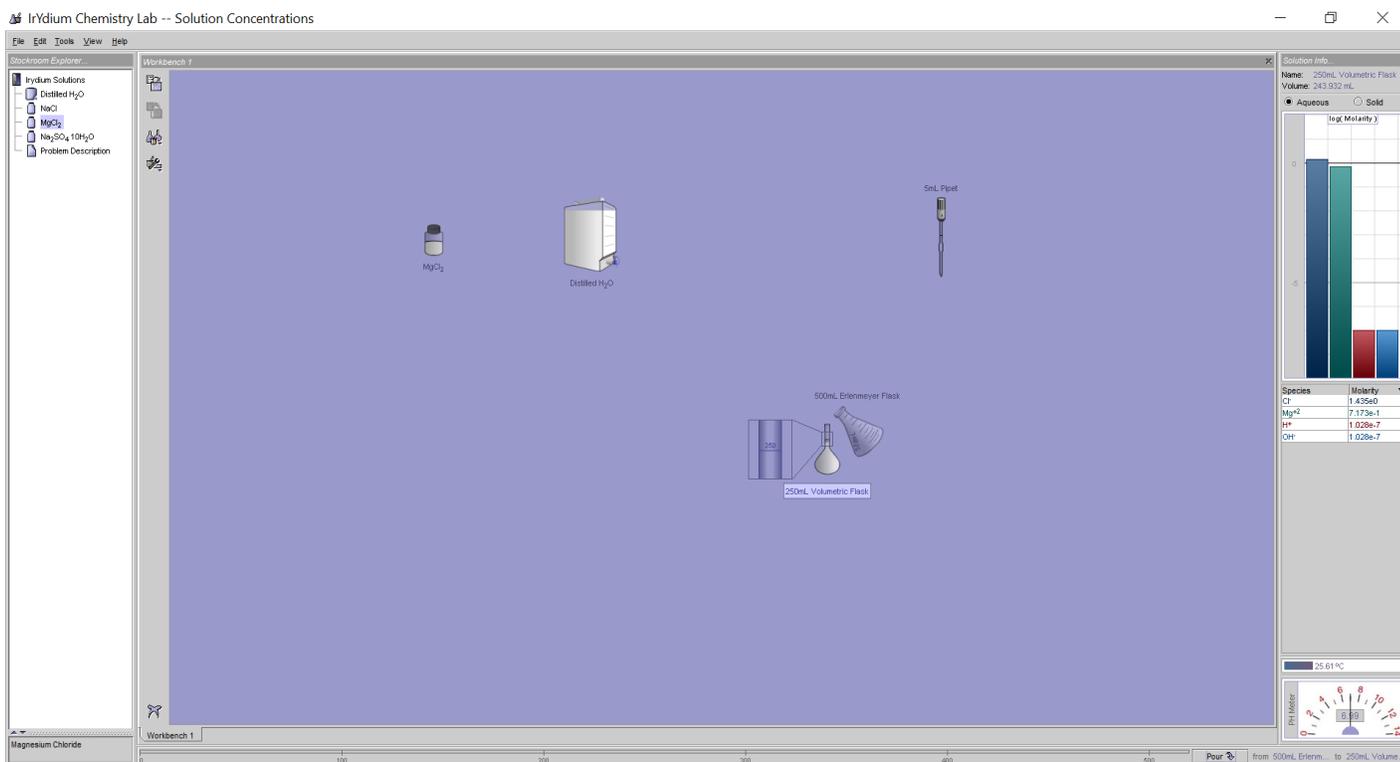
- a) Erlenmeyer flask was placed on the scale. Now, 16.661g of $MgCl_2$ was transferred into the flask.



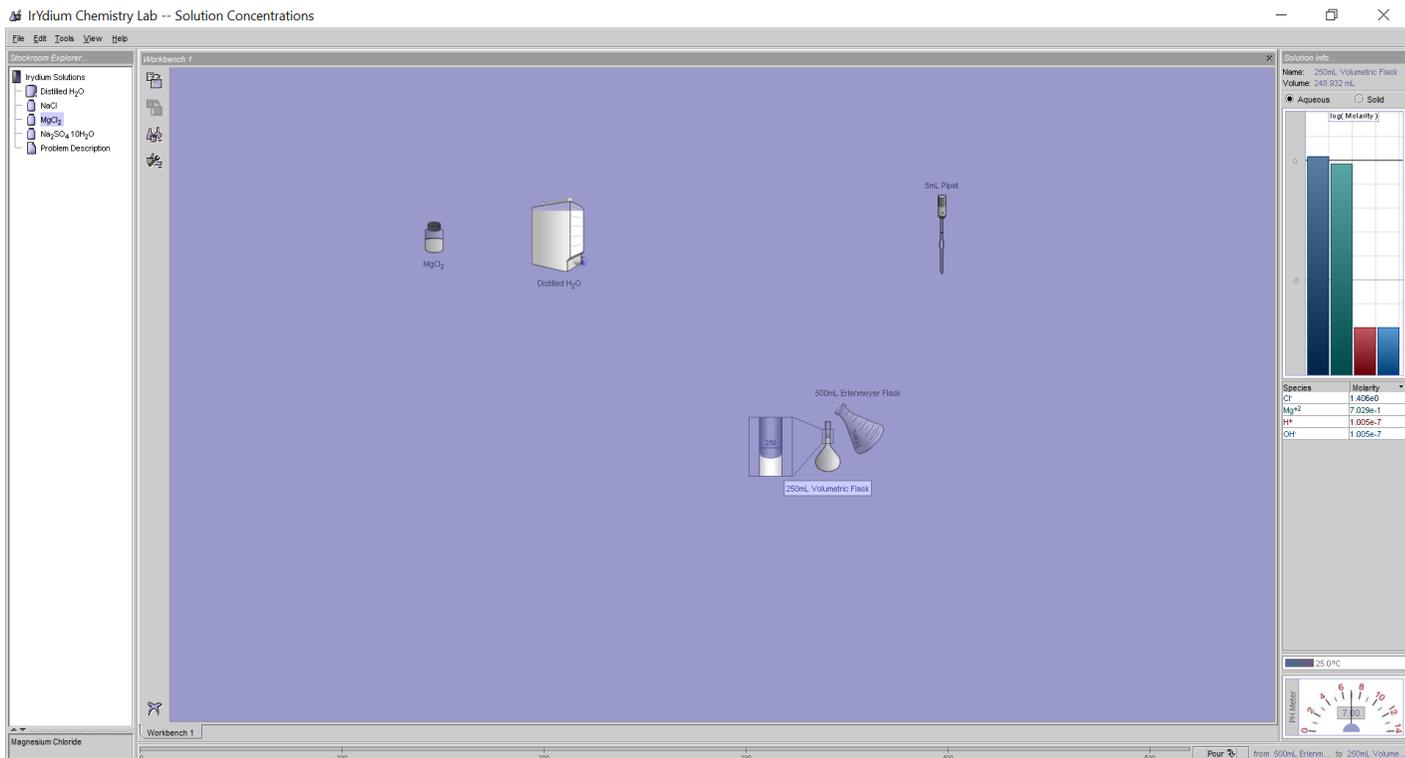
- b) Now, 240ml distilled water was added to the flask containing 16.661g of magnesium chloride.



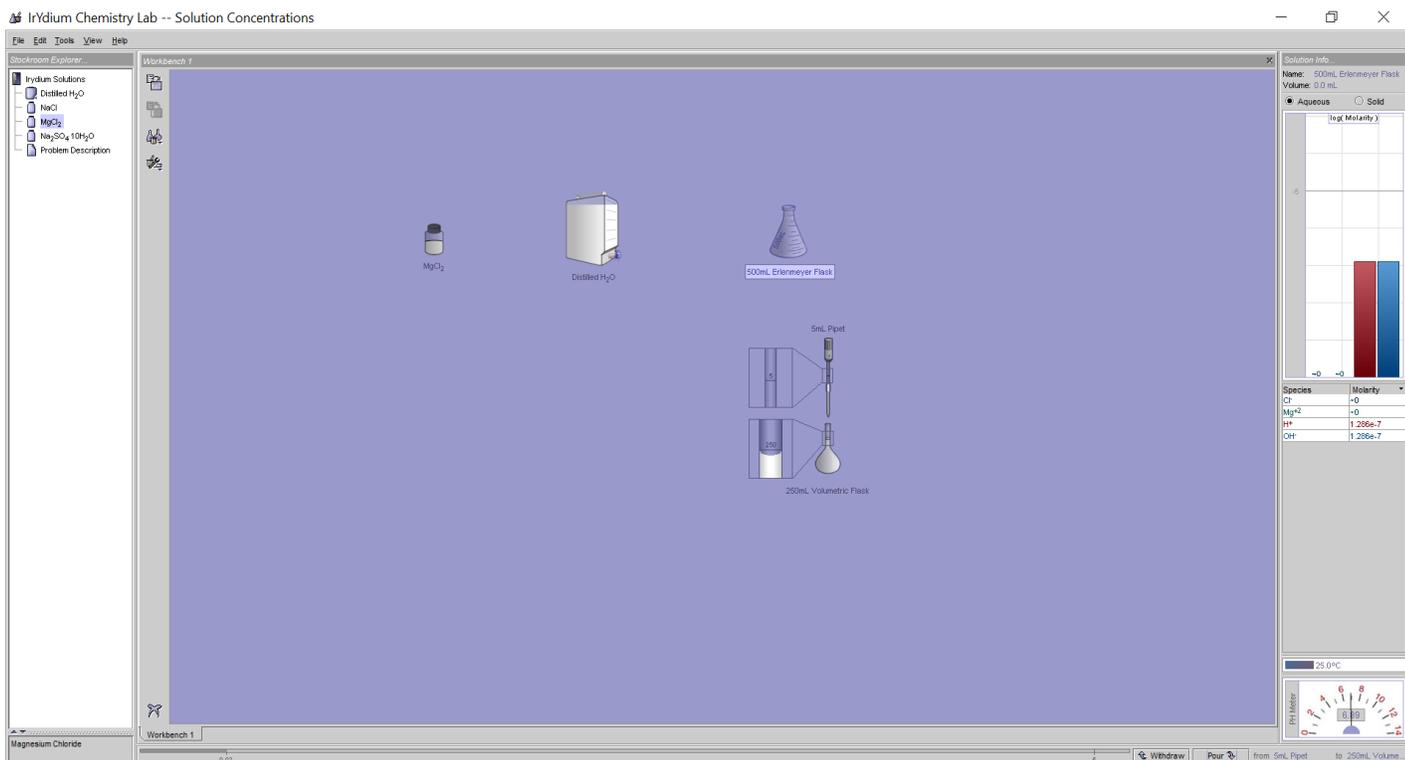
c) Now, the solution of the Erlenmeyer flask was totally transferred to the 250ml volumetric flask.



d) To wash the Erlenmeyer flask, 5ml of distilled water was transferred to Erlenmeyer flask and finally transferred to 250ml volumetric flask.



e) Now, 5ml of distilled water was transferred to 250ml volumetric flask using pipette.



RESULT –

Stockroom Explorer

- Iridium Solutions
 - Distilled H₂O
 - NaCl
 - MgCl₂
 - Na₂SO₄ 10H₂O
 - Problem Description

Workbench 1

MgCl₂ Distilled H₂O 500mL Erlenmeyer Flask 5mL Pipet 250mL Volumetric Flask

Solution Info

Name: 250mL Volumetric Flask
Volume: 249.474 mL

Aqueous Solid

Species	Molarity
Cl ⁻	1.403e-9
Mg ²⁺	7.014e-1
H ⁺	1.005e-7
OH ⁻	1.005e-7

24.99°C